Boeing Plant 2 Seattle/Tukwila, Washington

Uplands Corrective Measures Study Volume VIIIb: 2-31 Area

Data Gap Investigation Report

Part 2 of 2

Attachment H Field Information

This page intentionally left blank.

July 2010 Report



Mein The Pair."
ALL-WEATHER
NO. 351

"Hitein the Pair"

Name Kristin Addia

295 NE Gilman Blyd Ste 201

Environmental Partners Inc

Phone 425-358-0001

Project 2-31 CMS

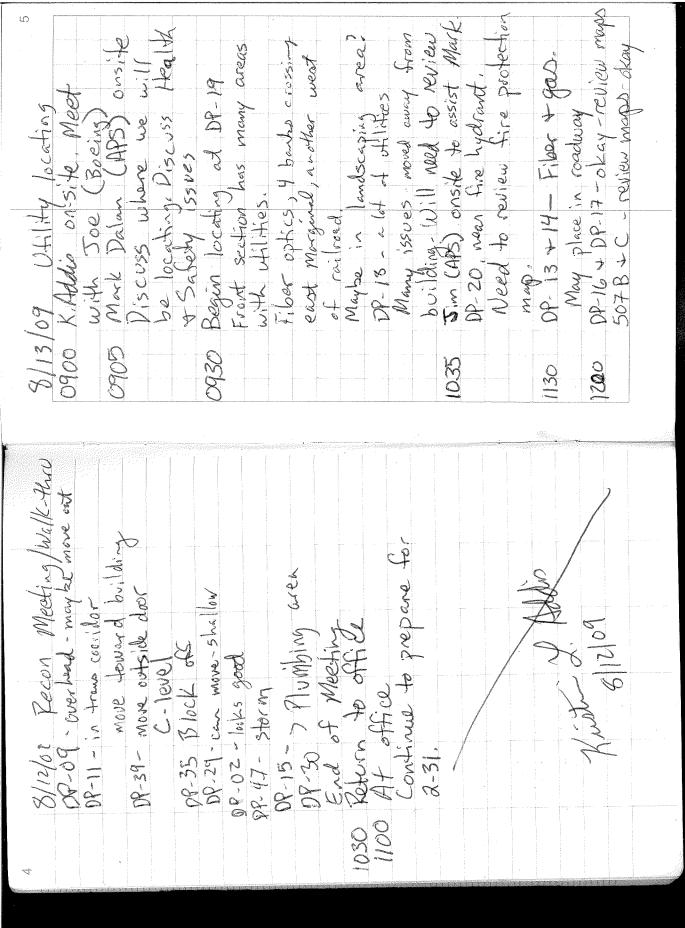
Seconty Secon Cates sold lighted use

Dispatch - Forkitt 206-655-3266 Clear Vinyl Protective Silpcovers (Item No. 30) are available for this style of notebook. Helps protect your notebook from wear & tear. Contact your dealer or the J. L. Darling Corporation.

| | | | gui | |
|-----|----------|-----------|------------------|--|
| | CONTENTS | REFERENCE | Locas | |
| *** | | PAGE | 三 万 万 万 | |

DATE

DP-03- locate alt. location in transportation DP-31- overlead location got alt location Ron L Gray 1520 Building-Stores Wednesd DP-40 - open door or move to travos acalle OPIZ With overhead. OP-3 - add PCB du to 2-10 K. Abolis onoite. D. Kunkel ons. He 5:11 + Ted - Golder DP-27- hund to Burna Road DP-26- Hund- in hallway- 2 xors; lole 100. DP-28- 614- 0451 access DP 48 - red electric utility bont DP-24 - trypel to the oust 19-6-move of man door from 00-38-Lorge Levalation 010-07-move out pack electrical 20-25 - hours / limited access 09-10 - okay 40 move mond D-32. More away from consu 8/12/09 2-31 Zecon S. Parsons 9192748 - East Morginal Way 9192761-11ct Ave. South Side 8/10/09 2-31 Boeing Locates All tickts Entered requests accepted. Just 5 Halis USing FIFC



See F & M. Dalan

M. Dalan reminds Joe + Kris

Int the fiber locate in

Eront of the 2-22 building
is only cable + not files

according to map, BTSM

SketloA of Boeing,

M. Dalan to locate water lines Mark to call when he is on the way. K. Addio to Issaqual to Fick up maps. M. Dalam informs K. Addio that he will be onsite to Addis onsite meet with ask why he is not onsite. 0708 Kildes onsite 'nety or30 call M. Dalan (APS) to Kitodio inform J. Fla that M. Dalan Will be 8/14/09 WHITH locating Med DP-12. 0840 Move off of ratch area. Files? a storm near catch bosin APS offsite K. Addis meets with Toe (Breing) OP-42 - move away from building Per Boeing C302, 14ap gassible High Voltage y80V E122, May be overhead. Not sanitory. Goes into 3-40/2-31, Clear. Water line (10") in road Try in between waterline due to 6" sanitary Mat 2 Holis Now oot of shed, Loute East of catch basin. 8/13/09 To ceview Utility Lockthuy Storm - DP-Q Stall continue Storm 1600 K. Addio offsize 1645 at office

build, which is end of utilities close to DAB. DP-50 is now 20 'South Marked DP-11 ~ 18" from 2-405 gas is new water line or can go east of okd.

Unknown. 2 locations okd.

DP-42-3 South of bilding corner

and 15 west of double doors. Spoke with Ted about moving DP-50 Mas can move closer if moved inside 240's ble it was too MOVE 213' NOT of Teds eigend mark
DP-11 double check maps
Measured 10 out from abondoned gas line DP-10. Can go inbetwen pwr & other valenown 8/14/69 cox. UHILAY Location DP 50 - clear, water for DP-43-okay clear wall, on crosswalk At ead of Shire.

8/4/09 cont, Willty Locating
1315 OP-41-to close to fibe
on vary 2 ages to fibe
on vary 2 ages directly entried
of door NY.

1322 Requested 50e clock Haz
Mark Tainks there may be
to overetted 50e clock Haz
to overetted 50e clock Haz
bank in large path area due
to overetted 50e clock Haz
to overetted 50e clock
High Voltage dut
1 aside location okay:
It somewhere is back okay:
It somewhere is treat:
It somewhere sorting and evicential

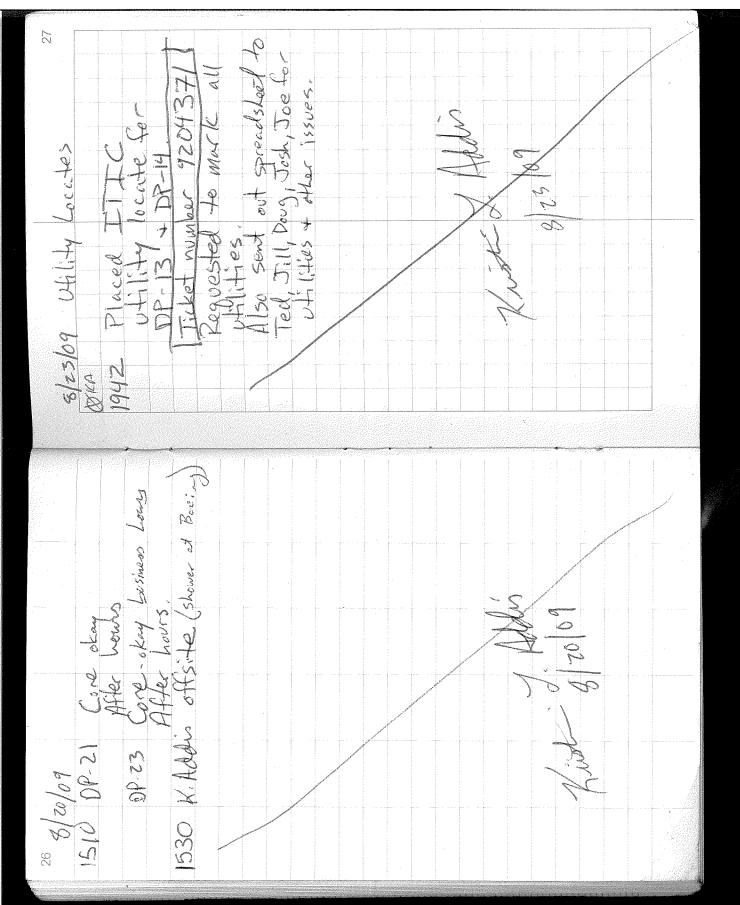
| | | | Other Available | 0k Soth Fork Bridge Replacement 316-63 (1040 \$453) | Electrical Master Drawing E.1-1 | -Shows high voltage Gower. APS | previously potholist of Incited ail | 3 | S.P. B.R (104 of 453) 0/2 | Bachag E130-0K | STSMP Short 10-0'k abandoned Lielline | A May have power ET-1 FIND! | | Loo de | | OK-wait for other maps from Joe. | | 2" PVC from Demo boilding 2-32 BISMP 4 | *************************************** | . ok - Check for 8" Storm BISMP 4 | |
|----------|-------------|--------|--------------------|---|---------------------------------|--------------------------------|-------------------------------------|---|---------------------------|----------------|---------------------------------------|---------------------------------------|----|---|----------------------|----------------------------------|--------|--|---|-----------------------------------|----------|
| | THE OFFICE | | HIMC. | + 1 1 1 1 1 1 1 1 1 1 | | | | | .Α | | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 48 | ナ (4) (4) (4) (4) (4) (4) (4) (4) (4) (4) | respectable. | | - | 7 | | | |
| <u> </u> | | | | 3 | | | | | ر م | | | チ | | 송 | 8" Con. | 2/2/N | R | 8′. Bv. | <u> </u> | ゔ | |
| 5 | | | | 3 | | • | | | タ | | | 7 | | <u>ل</u> ا | S S S | 3.50 S | 7 | ر ق و'(| ("(0~ | 성 | (0"5+0CM |
| | Not pasife- | Cevier | 5 | 0 × | | | | | - | AS ich | | 농 | * | 성 | ₹2 34 24 24 | OK so west | の元に合きま | ە 7 | о Л | | 0 F |
| C | Not ousite | | Mass Vlimb Fire | 3 | | | | | 条形 | Jucales | works | Ž Ž | | 쏭 | 4 | | 3 7 | ,성 | 100 Sept. 100 ON | 낭 | 0 Y |
| 77 × | | | | 2 | | | | | 9P-02 | | | 08-03 31 air | | 30°32 | DR-05 | 30,00 | 0P-04 | 75-08 | 18,63 | <u>0</u> | È |

| 8/18/09 UHI/Hy Locates cont. | BTSMP ONLEX | | 700 | OK High Vellage -middle of weel | ok ok wast for interior maps | Power | |
|------------------------------|--|--------------|------------------|--|------------------------------|--|--|
| | HIR | | 700 | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 20 2 | 4 | 10 m of 11 |
| ocates cout | Civilis Colder 12" Stern Stern Find oxfull | , | ok Panisu. ok | | ok ok | k ok | Kok san |
| | 5 X | B | | K ok storm | > 0 | ok ok | 7000 7000 0000 |
| 16 8/18/09 UHITY | PP-12 OIK | DP-13 Reloca | 6 7 6 6 | D-21 OK D-22 OK D-23 OK | 09-24 cirling DP-35 OK | 0P-28 12 10P-29 12 120 120 120 120 120 120 120 120 120 | 19-31 Gap(db) 109-32 06 109-33 06 109-34 06 (euo ab) |

| 8/18/69 UH/1/4 Locates cont. 17 | BTSMP OHL | | 70 X0 | OK High Vellage -middle of wall | ok ok wait for intriv maps | Power Power | |
|---------------------------------|---|--------------------|---|--|---------------------------------------|--|--|
| | HVA | | 700 | Y Y | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | We smark |
| ocates cout | CANHOS Golden 12"Storm Storm Find other | | ok ok | Storm Sent OK-Storm OK | ok ok ok | | SS. Oksun OK OK |
| T. F. | Plumb, Fire | Relocates | · · · · · · · · · · · · · · · · · · · | 7-18-20 Kg occaso 7-21 OK OK S 7-22 OK OK OK | 1 8 6 0 K | ok! | 10 (de) 10 10 10 10 10 10 10 10 10 10 10 10 10 |
| 16/18/0 | DP-12 | 90 P-13 7 7 7 7 | | DP-21 DP-27 DP-27 OP-23 | | 06-28-30-9-30-9-30-9-30-9-30-9-30-9-30-9-30- | 18-31 (20(b)) |

| 8/20/09 UHILH LOCKLING 288F 23 WW of Original Spot Core RINL or Contract Core RINL or Co | Dr-09 Soft parking spaces Core, Haz Mat marking sport Or 41 Soft Sanding | OP-39 Core After hours OP-37 Core After hours prime hours ob to core during prime hours | DP-35 Asphalt After hours DP-05 Haphalt After hours DP-06 Weed to move Ask Golder Core. After hours PCB's OP-34 5 W of onight Core After hours. OP-35 I East Ask Ted Core | Some that some |
|--|---|--|--|----------------|
| 28/20/09 UHITH LOCATES 270°F 1130 Walk thro Sill, Joe, Kis DP-45 9'W 10'N of securous location | 2 SW of the Correction of the Mounts | DP-20 move 5 500th Sill ok'd wove Core Block Darking | | |

| 8/20/09 (Hilth Locales 25 18/20/09 (Hilth Locales APREMUS COC. do APREMUS COC. do APREMUS MONEY SCOR ACCESS APREMUS MONEY SCOR HOLLWAY | 60 W 9 M 19 M | Core ampline | DP 52 Core After hours | | 1) Deor 103 173 men 102 |
|--|--|---|--|---|------------------------------|
| 8/20/09 Utility Locates 1427 DP-39-Affer homes/Weekend Core, After homes/weekend | 08.02 Block of whole corner paths for access, Ashatt Trock #3251 | OP-01 Cone anythme of Permit-sidewalk check werhood jower | DP-15 Inside locked gate-combo lock hand auger, Core, APS | Will After hours, core, MAS Transgrithmen ailse hours 7:3 North Corey Drill | pp. 35 H. M. M. Her how both |



| 2/8 | 20 3 | | | | 222 | | |
|--|--|--|---------------------------------------|--|--|---|---|
| | | parameteristis in property and the second section of the second s | | | | iganisas varias sa esta de la constanta de la c | |
| | The state of the s | | | | i de | | 4 |
| 50 | 2 - 7 3 | . S | les) | in the transfer of the transfe | in the | | har sta |
| 50 | 23 3 % | La | (60) | The state of the s | 709 | | Para La |
| 12 | 子方文 | Jag K. | 7 | 2 Co | 7 602 | <u>_</u> 5 | fwi of n. & |
| 3 | S & B & B | 1, 20 i | , ")" | 6 5 6 F | M E | r z | 1 6 6 C 23 |
| The state of the s | 8 6 | ret 10 | 212 | J. U. 4 | J. W. 3 | | 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| · A | Asi of | | \$ 00 miles | 3 3 3 | 7.2 | | 8 2 - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - |
| 1-3 | | 35 34 | 100 | Ser Ser | 20.00 | SE SE | 3 4 5 4 8 |
| 30 | + Report to deliver to WillEin K. Addis onsite. Meet with Golder representatives. Caller eguipment, | Cascade onsite. Meet with Kilddis. Roguest they load ~ 10-55 gal drums | D. Kurled (EPI) & Ted No try (Golder) | Health & Safaty Meeting See Sign in Shoot, Discuss contamination, Doctords willities schoolube deillo after at | Begin drilling at PLD-507C. The Hand digger Susing postule digger for Sinsing postule digger | Continue drilling | At 81.5' TO gallons of water Used EPT indicates to Caseda Hist Hay need to have centralizers on the six-packed screen. Andy indicated that they do not have centralizers with them. EPE |
| | 1000 | code | 12 t | 75 8 18 18 18 18 18 18 18 18 18 18 18 18 1 | | 美美 | 1 |
| 9 | 1 + 2 3 7 | 33 | 0.15° | 党代毕 | | 3 6 6 | ्रं प्रमुख्य |
| 8/24/09 Well Installation PLZ-507C | 730 K. Addis onsite. Meet with Colder representatives. Caller equipment, | 0 | | V | | 000 | |
| 8 8 | 0500 | 0450 | 080 | 818 | 82 | 8 2 2 3 | 1530 |
| Thursday, postinger | | O | 19 | 9 | | AMERICAN | |

12469

Cequests that they have someone

deliver the centralizers to the site.

620 Wasting to centralizers

outsite. Screen will be set at

655 - 75 bgs.

1700 Prepared screen and pur black

installed

installed

bags of Sand III thish manument

1815 Brill is out of enclosed area

1820 Cascade + K. Addio office

1820

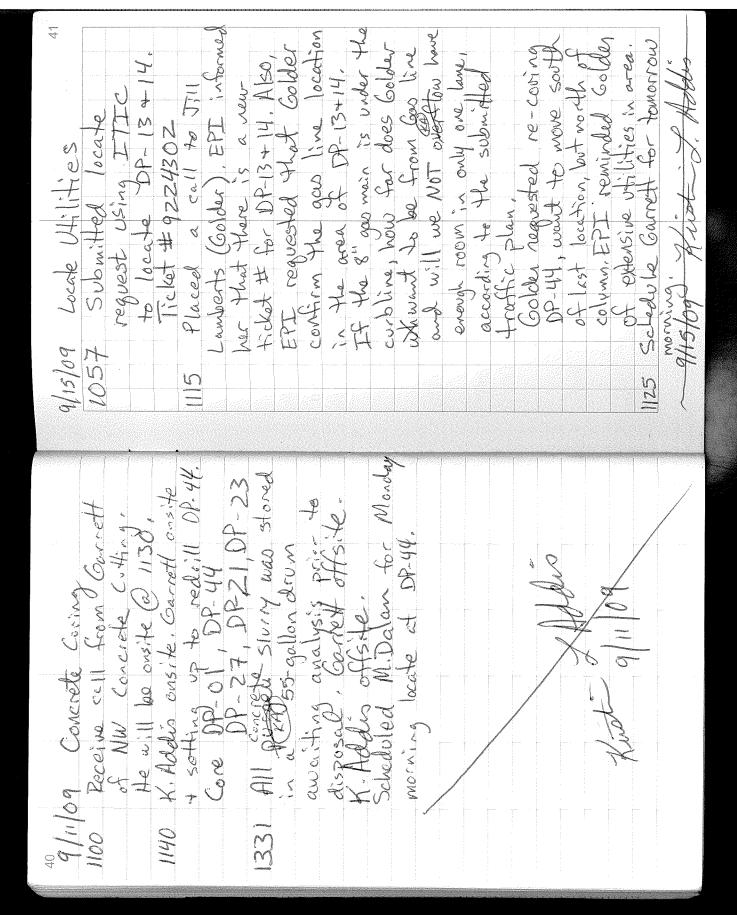
| | 1415 Call | y old of | .: W35 | | 1515 EPT | Droppe | 1538 Cas | will well | | | | |
|--|--------------------------------------|------------------------------------|--|--------------------|----------|--------|---------------------------------|--|---|------------------------|-----------------------------|--|
| 30 8/25/69 Well Installation 25°Clousy | Oto Leave office. 0730 K. Alle miste | 0:743 Call Boeing Security to open | 0751 Exercise seconty opening getter. 0752 Receive call from Jill L. (colder) | From supply truck, | | | 1033 At 30'. Encountering house | 110 at 45,35 gallons water to install rell | 1200 Well Construction Complete 1240 EPF informs Cascade to wait | Boeing banding policy. | to show EPI + Golder how to | |

9/25/09 Well Installation
1415 Call Eveing security to open gate
in 2-31 to temporarily stare soil
drum. Per Joe Flaherty, Boeing
to the 2-44 area.
1435 EPT tolder leave fenced orec.
Toe Flaherty to remain twent for
security. Cascade to decon
equipment.
1515 EPT unloads equipment for drum
banding in 2-44 as requested by
J. Parsons.
1538 Cascade, Golder t EPI offsite.

| 100-1 HT BOSING, Weest with Jill 2. | 1130 Moving empty droms to 2-4% |
|--|--|
| of Golder's fer Jill, it is clay | Drow storage for Concrete |
| 1045 K. Athlis to coning Till ! | |
| | They will be onsite in 20 minutes |
| Way for points of | 1275 NW Concrete Garret onsite |
| 1130 Pacine call from M. Dalan (APS) | |
| He is onsite. K. Addio interns Lin | 1240 Begin coning @ 07-08. |
| that I aill be at the atrium in | All outdoor cores will be scaled |
| 15 misures. | with plumbars putty |
| 1155 Meet with M. Dalan. Mork is marking | 1310 Received call from J. Parsons. Ste will |
| Or-44 to Dr-46 | 5-167 by 500m. |
| Dr. 44 1 St of original mark | 1345 J. Parsons speaks with Stores |
| Vr. 15 - Locked area. Boeing employees | personnel to keep front door open |
| 12.7 over acte. OK - Keloca | |
| 08-48-01 | 1410 (ore 3-5ide stores |
| 12-02-0X | 1 1 1 2 Conclete Slotty 25 |
| 00-26-04 | Mr. 2-40 Riilding III commit |
| 1339 Finish beating | Was document of a local columnia |
| 1345 K. Apple a M. Dalan offsite | and to water rings. One to |
| 1425 At other All His | |
| Just & rass | |

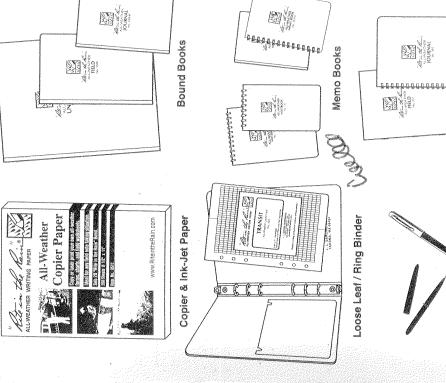
Borrow equipment from 2-49. Clips
do not fit this birding either
Call security to secure
goode area EPE + Cascade
out of enclosure. Cascade offsite. Return equipment, Unload equipment.
K. Addis offsite: Mallis Begin sales PLZ-507B
Begin Bail + Surge at PLZ-507B
See Monitoring Well Dovelopment
Booklet Condetails, 0753 Cascode - Casey a lynn ons: to Clean-up area.
Clips for birding eguipment
do not fit. Kithdie repeats directions Receive call from security 0810 Loading drums in 1845 Call Seconity to open Pereloquent Complete 9/8/09 Well Perdoponent 0700 K. Holdin onsite in tunnels. Next Wed. Gampt offsite Walk thru remaining probes Correct onside (NW Concrete Cuthing) 4 Said he would arrive a 12:00 PM Move to North side to core DP-22 coing complete. Will have to return do to double think slab moderate rish with all whilthes in the area, Be very conety. K. Addis offsite 9/3/09 Concrete Coring ~TU F 1115 K. Addio onsite. Garrett called Explain DP18-20 are at a 1 motor of 3/08 with Josh.

9/9/09 Concrete Crius alof Clordy
1000 A. Addio ons, te to bind
developing,
1035 Borrow bixding acripment
1054 Call Security to open gate.
1150 Finished binding pallots of
1200 Carret onsite for coring.
1200 Call Glen Hunden to weithy analytim
1705 Call Glen Hunden to weithy analytim
1705 Call Glen Hunden to weithy analytim
1730 K. Addio offsite former for the former for the former for the former former



| 1015 | |
|--|---|
| 0/10/ | |
| 2 | 1000 Garrell (NW CC.) onsite |
| Ŏ | 0945 Locade at DP-28ED |
| | Went over locates to DP-02 |
| | K. Addis week with M. Dalan |
| 1, EE hor .n.y. | 0415 Walk-thru complete - Harry offsite |
| 1610 Officed. Tes begins removing | Discuss DP-62. |
| details. | meet briefly with Joe Flaturty. |
| 1300 Regio DP-13 Parke to something hast lest for | he will be onsite @0830. |
| Cores are ~ 20" thich | surveyed. |
| Carroll owite | all locations that need to be |
| | CROS Walk locations - show DHA |
| EPI completing paperwork, while | Discuss H+S. Hive |
| | 0800 K. Addie onsofe. DHA ousite- Harry |
| Traffic control is coming from | gathering equipment + paperwork |
| best informs as that | 0720 K. Addin lower office wher |
| 9/21/04 | 9/3/01 Surveying, Locating, Coring |

2900528 "18/09 PLZ-507C DEV. WICTER 2900529 "BELL-WEATHER WRITING PAPER "1



Notebooks

All-Weather Pens

2-31 Area Concrete Coring Field Book Corrective Measures Study Data Gaps Investigation

Boeing Plant 2 Seattle/Tukwila, Washington Project Number 17511.1

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, Washington 98027 (425) 395-0010

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| Boeing Flan | - | | | | | | | |
|----------------|-----------------------------|-----------------|---------------------------------|-----------------------|--------|--------|---------------|--------|
| Location | Sample Interval (ft bgs) | Date of coring | Diameter of core (inches) | Core 1 | Core 2 | Core 3 | Extra core | Notes |
| New Wells | | | | | | | | |
| PL2-507B | 35 - 45 | Asphald | 16 | And the second second | | | | |
| PL2-507C | 75 - 85 | Asphalt | 16 | | | | | |
| Direct Push Lo | cation | | | | | | 1 | |
| 2-31-DP-01 | 10 - 14 | 7 | 3 | 611 | | | | |
| 2-31-DP-02 | 10 - 14 40 - 44 | Asphalt | 3 | | | | | |
| 2-31-DP-03 | 10 - 14 40 - 44 | 8/28 | 3 | 64 | | | | |
| 2-31-DP-04 | 10 - 14 40 - 44 | 8/28 | 3 | 64 | | | | : |
| 2-31-DP-05 | 10 - 14 40 - 44 | Asphalt | 3 | - | | | | 788\$J |
| 2-31-DP-06 | 10 - 14 40 - 44 | 8/27 | 3 | 611 | | | | |
| 2-31-DP-07 | 10 - 14 40 - 44 | 8/28 | 3 | 6" | | | | |
| 2-31-DP-08 | 10 - 14 40 - 44 | 8/27 | 3 | 7" | | | | |
| 2-31-DP-09 | 10 - 14 40 - 44 | 8/27/09 | 3 | 9" | | | | |
| 2-31-DP-10 | 10 - 14 40 - 44 | 8/27 | 3 | 6" | | | | |
| 2-31-DP-11 | 10 - 14 40 - 44 | 8/78 | 3 | 6" | 6" | | | |
| 2-31-DP-12 | 10 - 14 40 - 44 | 8/27 | 3 | 9" | | | | |
| 2-31-DP-13 | 10 - 14 | street Helz1 | 3 | 244 | | | | |
| 2-31-DP-14 | 10 - 14 | street 9/21 | 3 | 244 | | | | |

| Location | Sample Interval (ft bgs) | Date of coring | Diameter of core (inches) | Core 1 | Core 2 | Core 3 | Extra core | Notes |
|------------|-----------------------------|------------------|---------------------------|---------------------|--------|--------|---------------|-------|
| 2-31-DP-15 | 10 - 14 | 9/3 | 3 | Double, slab 18" | : | | | 84 |
| 2-31-DP-16 | 10 - 14 | asphalt grass | 3 | | | | | |
| 2-31-DP-17 | 10 - 14 | grass | 3 | | | | | |
| 2-31-DP-18 | 10 - 14 | 9/9 | 3 | 6" | | | | |
| 2-31-DP-19 | 10 - 14 | 9/9 | 3 | 6" | 690/21 | | | |
| 2-31-DP-20 | 10 - 14 | 9/9 | 3 | 6" | | 4.00 | | |
| 2-31-DP-21 | 10 - 14 | Asphalt | 3 | 611 | | | | |
| 2-31-DP-22 | 10 - 14 | 9/3 | 3 | 7" | | | | |
| 2-31-DP-23 | 10 - 14 | Asphalt | 3 | 6 | | | | |
| 2-31-DP-24 | 10 - 14 | 8128 | 3 | 6 n | | | | |
| 2-31-DP-25 | 10 - 14 | 8/28 | 3 | 6" | | | | |
| 2-31-DP-26 | 10 - 14 | 8/28 | 3 | 4 h | | | | |
| 2-31-DP-27 | 10 - 14 | 9/11 | 3 | 61 | | | | |
| 2-31-DP-28 | 10 - 14 | 8/28 | 3 | 6" | | | | |
| 2-31-DP-29 | 10 - 14 | 9/3 | 3 | 6 n | | | | |
| 2-31-DP-30 | 10 - 14 | 9/9 | 3 | 18" | | | | |
| 2-31-DP-31 | 10 - 14 | 8/27 | 3 | 6" | | | | |
| 2-31-DP-32 | 10 - 14 | 8/27 | 3 | 6" | | | | |

| Location | Sample Interval (ft bgs) | Date of coring | Diameter of core (inches) | Core 1 | Core 2 | Core 3 | Extra core | Notes |
|------------|-----------------------------|-----------------|---------------------------------|------------|--------|--------|---------------|-------|
| 2-31-DP-33 | 10 - 14 | 8/27 | 3 | 6" | | | | |
| 2-31-DP-34 | 10 - 14 | 8/27 | 3 | 5′′ | | | | |
| 2-31-DP-35 | 10 - 14 | Asphalt | 3 | | | | | |
| 2-31-DP-36 | 10 - 14 | 8/27 | 3 | 5" | | | | |
| 2-31-DP-37 | 10 - 14 | 8/27 | 3 | را في في ا | | | | |
| 2-31-DP-38 | 10 - 14 | 8/28 | 3 | 14 14 PA | He 15" | 611 | | |
| 2-31-DP-39 | 40 - 44 C-level (top of | 8/27 | 3 | 6" | 6" | 6" | | |
| 2-31-DP-40 | 10 - 14 | 8/28 | 3 | 7" | | | | |
| 2-31-DP-41 | 10 - 14 | 8/12 | 3 | 6" | | | | |
| 2-31-DP-42 | 10 - 14 | 8/27 | 3 | 6" | | | | |
| 2-31-DP-43 | 10 - 14 | 8/28 | 3 | Ln | | | | |
| 2-31-DP-44 | 10 - 14 | 9/9 | 16 | 108 n | 1011 | 10" | | |
| 2-31-DP-45 | 10 - 14 | 9/9 | 76 | 108 | | | | |
| 2-31-DP-46 | 10 - 14 | 9/9 | 36 | 16 M | | | | |
| 2-31-DP-47 | 10 - 14 | 9/3 | 3 | 8" | | | | |
| 2-31-DP-48 | 10 - 14 | 8/28 Asphalt | 3 | 64 | | | | |
| 2-31-DP-49 | 10 - 14 | L | 3 | | | | | |
| 2-31-DP-50 | 10 - 14 | 9/3 | 3 | 6 N | | | | |



Attachment C: Health and Safety Plan for 2-31 Area Data Gap Investigation

Boeing Plant 2 Seattle/Tukwila, Washington

Prepared For:

The Boeing Company P.O. Box 3707 M/C 1W-12 Seattle/Tukwila, WA 98124

April 2009

Prepared By:

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, WA 98027 (425) 395-0010

Douglas C. Kunkel L.G., L.H.G. Principal Hydrogeologist

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

1.0 PLAN OBJECTIVES AND APPLICABILITY

This Health and Safety Plan has been written to comply with the standards prescribed by the Occupational Safety and Health Act (OSHA) and the Washington Industrial Safety and Health Act (WISHA).

The purpose of this health and safety plan is to establish protection standards and mandatory safe practices and procedures for all personnel involved with field activities associated with the 2-31 Area Data Gap Investigation at the Boeing Plant 2. This plan assigns responsibilities, establishes standard operating procedures, and provides for contingencies that may occur during field activities. The plan consists of site and facility descriptions, a summary of work activities, an identification and evaluation of chemical and physical hazards, monitoring procedures, personnel responsibilities, a description of site zones, decontamination and disposal practices, emergency procedures, and administrative requirements.

Mr. Josh Bernthal, of Environmental Partners, Inc. (EPI) is the designated Site Health and Safety Officer. Mr. Doug Kunkel and Mr. Ted Norton are designated as alternate Site Health and Safety Officers. As Site Health and Safety Officer, Mr. Bernthal has total responsibility for ensuring that the provisions outlined herein adequately protect worker health and safety and that the procedures outlined by this Health and Safety Plan are properly implemented. In this capacity, Mr. Bernthal will conduct ongoing oversight and site inspections to ensure that this Health and Safety Plan remains current with potentially changing site conditions. Mr. Bernthal has the authority to make health and safety decisions that may not be specifically outlined in this plan, should site conditions warrant such actions. In the event that Mr. Bernthal leaves the site while work is in progress, an alternate Site Health and Safety Officer will be designated.

The provisions and procedures outlined by this Health and Safety Plan apply to all contractors, subcontractors, owner's representatives, oversight personnel, and any other persons involved with the field activities described herein. All such persons are required to read this Health and Safety Plan and indicate that they understand its contents by signing the Site Health and Safety Officer's copy of the Plan. In addition, all such persons are required to provide documentation of their current certification under Occupational Safety and Health Administration's (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, 29 CFR 1910.120. Copies of this Health and Safety Plan have been distributed to a designated representative of the following companies and/or organizations:

The Boeing Company

It should be noted that this Health and Safety Plan is based on information that was available as of the date indicated on the Title Page. It is possible that additional hazards that are not specifically addressed by this Health and Safety Plan may exist at the work-site, or may be created as a result of on-site activities. It is EPI's firm belief that active participation in health and safety procedures and acute awareness of on-site conditions by all site workers is crucial to the health and safety of everyone involved. If you identify a site condition that is not addressed by this Health and Safety Plan, or if you have any questions or concerns about site conditions or this Plan, immediately notify the Site Health and Safety Officer.

3.0 HAZARD EVALUATION AND RISK ANALYSIS

In general, there are three broad hazard categories that may be encountered during site work; Chemical Exposure Hazards, Fire/Explosion Hazards, and Physical Hazards. Subsections 3.1 through 3.3 deal with specific hazards falling within each of these broad categories.

3.1 Chemical Exposure Hazards

Table 1 presents chemical-specific data regarding permissible exposure levels (PELs), likely pathways of exposure, target organs that will likely be affected by exposure, and likely symptoms of exposure for hazardous substances that are potentially present at the site. Table 1 data were compiled from the NIOSH Pocket Guide to Chemical Hazards, September 2007 edition. It should be noted that the PELs are the regulated limits; Recommended Exposure Limits (RELs) by NIOSH are guidance but are listed as a reference.

Table 1: Chemical-Specific Exposure Data

| Chemical Name | REL* PEL* | | IDLH* | Exposure Route | Target Organs | Symptoms | |
|---|--------------------------------|----------------------------|-----------------------|---|--|---|--|
| Aroclor (1242) [CAS 53469-21- 9] | NE | NE | NE | See Total PCB | See Total PCB | See Total PCB | |
| Aroclor (1248) [CAS 12672-29-6] | NE | NE | NE | See Total PCB | See Total PCB | See Total PCB | |
| Aroclor (1254] [CAS 11097-69- 1]] | NE | NE | NE | See Total PCB | See Total PCB | See Total PCB | |
| Arsenic (elemental) [CAS 7440-38-2] | 0.002 mg/m ³ | 0.010 mg/m ³ | 5 mg/m ³ | Inhalation; ingestion; skin/eye contact | Skin; respiratory system; kidneys; central nervous system; liver; Gl tract; respiratory system | Irritation of skin; dermatitis; respiratory distress; diarrhea; kidney damage; muscle tremor; convulsions; GI tract; reproductive effects; lover damage | |
| Benzo(a)anthrace ne [CAS 56-55-3] | NE | NE | NE | | | | |
| Benzo(a)pyrene (coal tar pitch volatiles) [CAS 50-32-8] | 0.1 mg/m ³ | 0.2 mg/m ³ | 80 mg/m³ | Inhalation; skin/eye contact | Skin; respiratory system; bladder, kidneys. | Dermatitis; bronchitis. | |
| Benzo(b)fluoranth ene (coal tar pitch volatiles) [CAS 205-99-2)] | 0.1 mg/m ³ | 0.2 mg/m ³ | 80 mg/m ³ | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | |
| Benzo(k)fluoranth ene (coal tar pitch volatiles) [CAS 207-08-9] | NE | NE | NE | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | |
| Cadmium (dust) [CAS 7440-43-9] | Lowest possible exposure | 0.005 mg/m ³ | 9 mg/m ³ | Inhalation; ingestion | Respiratory system, kidneys, prostate, blood | Pulmonary edema, dyspnea, cough, chest tightness, substernal pain, headache, chills, muscular aches, nausea, vomiting, diarrhea, anosmia, emphysema, proteinuria, mild anemia | |
| Chrysene [CAS 218-01-9] (1,2- benzphenanthrac ene) | NE | NE | NE | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | |
| Copper (dust) [CAS 7440-5-8] | 1 mg/m ³ | 1 mg/m ³ | 100 mg/m ³ | Inhalation; ingestion; skin/eye contact | Eyes, skin, respiratory system, liver, kidneys | Irritation of eyes, nose and pharynx, nasal septum perforation, metallic taste, dermatitis. | |

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

3.3 Physical Hazards

Following is a summary of a variety of physical hazards that may be encountered on the job-site. For convenience, these hazards have been categorized into several general groupings and suggested preventative measures are also included.

| Category | Cause | Prevention |
|--------------------|---|--|
| Head Hazards | Falling and/or sharp objects, bumping hazards. | Hard hats will be worn by all personnel at all times when overhead hazards are present. |
| Foot/Ankle Hazards | Sharp objects, dropped objects, uneven and/or slippery surfaces, chemical exposure | Chemical resistant, steel-toed boots must be worn at all times on-site. |
| Eye Hazards | Sharp objects, poor lighting, bright lights (welding equipment), exposure due to splashes | Safety glasses/face shields will be worn when appropriate. Shaded welding protection will be worn when appropriate. |
| Electrical Hazards | Underground utilities, overhead utilities | Locator service mark-outs, visual inspection of work area prior to starting work. |
| Mechanical Hazards | Heavy equipment such as drill rigs, service trucks, excavation equipment, saws, drills, etc. | Competent operators, backup alarms, regular maintenance, daily mechanical checks, proper guards. |
| Noise Hazards | Machinery creating >85 decibels TWA, >115 decibels continuous noise, or peak at >140 decibels | Wear earplugs or protective ear muffs when appropriate. |
| Fall Hazards | Elevated and/or slippery or uneven surfaces. Trips caused by poor "housekeeping" practices | Care should be used to avoid such accidents and to maintain good "housekeeping". Fall protection devices must be used when work proceeds on elevated surfaces. |
| Lifting Hazards | Injury due to improper lifting techniques, overreaching/overextending, heavy objects | Use proper lifting techniques, mechanical devices where appropriate. |
| Lighting Accidents | due to improper illumination | Work will proceed during daylight hours only, or under sufficient artificial illumination. |

4.1.2 Action Levels

Photoionization Detector (PID)

| Response | Length of Time | Protective Measure |
|-------------|---------------------------|---|
| < 5 ppm | 15 minute average | Level D PPE |
| >1 ppm over | 15 minute average | Evaluate vinyl chloride concentrations relative to total |
| background | | VOCs using colorimetric tubes |
| 5-25 ppm | 15 minute average | Allow work area to vent. If persistent: Level C |
| 25-50 ppm | Sustained over 15 minutes | Level C PPE, High-efficiency organic vapor cartridges in respirator |
| > 50 ppm | One (1) minute average | Vacate work area, notify Site Health and Safety Officer or designated alternate immediately |

It should be noted that these action levels are based on the presence of benzene and vinyl chloride which have the lowest PELs and STELs of the compounds listed in Table 1.

4.2 Site Monitoring

The Site Health and Safety Officer will visually inspect the work-site at least daily to identify whether any new potential hazards have arisen. If and whenever possible, immediate measures will be taken to eliminate, or reduce the risks associated with these hazards.

4.3 Personal Protective Equipment (PPE)

It is anticipated that all field tasks will be performed in Level D PPE unless additional PPE is required because of task or site-specific upgrades. Level D PPE includes the following items:

- Nitrile inner and outer gloves
- Steel toe, steel shank work boots. Neoprene steel-toe, steel shank boots for ground water sampling and for drilling below the water table
- Hearing protection during drilling activities
- Hard hat during drilling activities and excavation work
- Safety glasses
- Cotton or Tyvek coveralls required

Level C PPE includes all Level D items plus the following:

- Full-face respirator equipped with organic vapor/HEPA combination cartridges (full face respirator replaces safety glasses for eye protection),
- Tyvek or Saranex coveralls
- Neoprene steel-toe, steel shank boots

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

6.0 SITE CONTROL

The following section identifies several activity zones located on the work-site. It should be noted that access to some of these activity zones (i.e. the exclusion zone) will be restricted to designated personnel.

The work site is secured. Pedestrians and other unauthorized personnel will not be allowed within the exclusion zone.

6.1 * Contamination Reduction Zone

A specified area will be established for the decontamination of sampling equipment and personnel. Because the location of this zone will change during the course of the investigation the site safety office will discuss the contaminant reduction zone location during each daily safety briefing.

6.1.1 Decontamination Procedures - Equipment

Split-spoon samplers and other down-hole equipment will be decontaminated with a solution of Liquinox™ or equivalent soap and potable water and rinsed with distilled or deionized water prior to collecting soil samples for analysis as noted in Section 3.8.2 of the work plan. An alternative method of decontamination is to hot water pressure wash all down-hole sampling and drilling equipment. All decontamination wastes will be containerized, properly marked, and left in a designated on-site location for disposition by Boeing.

6.1.2 Decontamination Procedures - Personnel

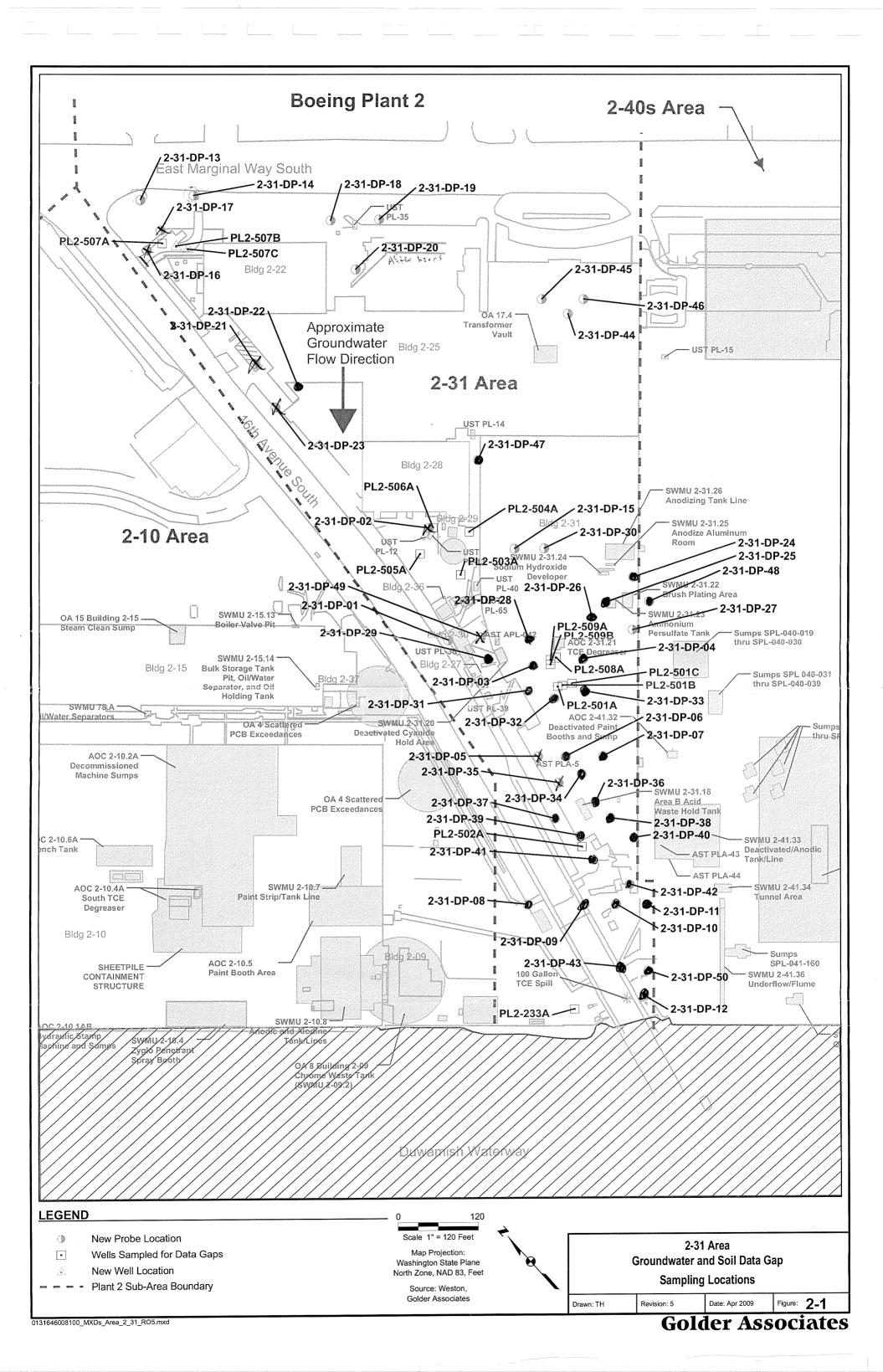
All personal protective clothing (i.e. nitrile gloves) and other miscellaneous waste will be bagged in opaque garbage bags and will be discarded in the trash. All on-site personnel must, at a minimum, wash their face and hands before eating, before break periods, and prior to leaving the site as noted in Section 3.8.3 of the work plan.

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

SIGNATURE PAGE

I have read this Health and Safety Plan and understand its contents. I agree to abide by its provisions and will immediately notify the Site Health and Safety Officer (Josh Bernthal, (425) 241-5400), or designated alternate if site conditions or hazards not specifically designated herein are encountered.

| Name (Print) Signature Date Company | /Affiliation |
|--|--------------|
| | PI |
| Garre Harrington That face for 8/2869 | Nucc |
| | |
| Kristin Addis, Kristie & Holdis 9/3/09 | FPT. |
| Garnet Harrington Hart forty, 9/3/09 | NWCC |
| Kristin Addis Krist & Addis 9/9/09 | - San |
| Carret Harrington Bout Haventon 9/9/0 | 9 NWCC |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| - | |



2-31 Area Direct-Push Probe Sampling Field Book Corrective Measures Study Data Gaps Investigation

Boeing Plant 2 Seattle/Tukwila, Washington Project Number 17511.1

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, Washington 98027 (425) 395-0010

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|--|--|--|--|--|--------------|
| YSI Multipunde | YSI | 556MB | OGALIS 4 AO | NA | 8/3/104 | 1430 |
| Calibrated to Autoc | | Manufacture | er Aurical | Lot Numb | | |
| pH = 4.00=4.01 | Turbic | lity = NA | | Temperature = | 21.67 ℃ | |
| Conductivity = 4,49 | mS/024A9SMBissol | ved Oxygen : | = 0 <u>.00 g=0.01</u> | Salinity = | NA | |
| Turbidity Meter | | | | | | |
| Comments: pH10-20 | T 2105557 ZERI N ORP | 228mV z | in Oakton 29 227.1 €08€1 | 512515 PH7 L'S SOLN +225 | =7.02 3-1.02 3-1.02 | 7276 7276 |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Turbidmeter | La MoHe | 2020e | SN-ME14943 | NA | 8/31/09 | 1500 |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | er | |
| pH = | * Turbio | lity = | | Temperature = | | - |
| Conductivity = | Dissol | ved Oxygen | = | Salinity = | | - |
| Turbidity Meter | 0.0=0.0 | 1.0 =1.05 | 10.00=18.19 | | | |
| | Torbodily 10:0 POTU TO 1/0 POTO 1/0 POTO | | | | | |
| | J | | | | | |
| Meter Type | Manufacturer | Model | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| | Manufacturer | Model Number | | Serial # | Date | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Serial # | 8/81/09 | 1430 |
| Meter Type Mostificancia | Manufacturer Y > L al Solution | Model Number 557 MPS | Mfg. Serial# O(A 113 4 AO er Aur\ ca\ | Serial # NA Lot Numb | 8/8 1/09 | 1430 |
| Meter Type Multipleaners Calibrated to Autoc | Manufacturer ソミエ al Solution | Model Number 557 HPS Manufacture dity = | Mfg. Serial# OFA 158 4 AO er Aurlea | Serial # NA Lot Numb Temperature = | 9/81/09 per 73/9 19/80c | 1430 |
| Meter Type Mostification Calibrated to Autoc pH = 4.00:3.98 | Manufacturer ソミエ al Solution | Model Number 557 HPS Manufacture dity = | Mfg. Serial# OFA 158 4 AO er Aurlea | Serial # NA Lot Numb Temperature = | 9/81/09 per 73/9 19/80c | 1430 |
| Meter Type Mostification to Autoc pH = 4.00:3.98 Conductivity = 4.49 | Manufacturer Y > I al Solution Turbic S/_:4490g Dissol | Model Number 557 HPS Manufacture dity = NA ved Oxygen | Mfg. Serial# OFA 158 4 AO er Aurlea | Serial # NA Lot Numb Temperature = Salinity = | 9/8/09 per 7359 1958°C NA | 1430 |
| Meter Type Mojripheamere Calibrated to Autoc pH = 4.00 \ 3.98 Conductivity = 4.49 Turbidity Meter Comments: OACTON PH 10 - Lot 2905 | Manufacturer Y > I al Solution Turbic S/_:4490g Dissol | Model Number 557 MPS Manufacture dity = NA ved Oxygen 2520 Page Zoseus so | Mfg. Serial# Ofalt9 440 er Aurica = 6.00 10 0.00 1 | Serial # NA Lot Numb Temperature = Salinity = 251 < 07/2 : (25/28-1/2) Rental Co. | 9/8/09 per 7359 1958°C NA | 1430 |
| Meter Type Hostifmentors Calibrated to Autoc pH = 4.00:3.98 Conductivity = 4.49 Turbidity Meter Comments: OACTON PH7-LOT 29 Meter Type | Manufacturer Y & L al Solution Turbic SL = 4.490g Dissol | Model Number 557 MPS Manufacture dity = NA ved Oxygen 2520 Page Zoseus so | Mfg. Serial# OFA 158 4 AO Er Aurica = 6.00 12 0.05 11 L EN SOLÍO LOT 281 W LOT 1907276 | Serial # NA Lot Numb Temperature = Salinity = 251 © 07/L = 0 +228 V 2 Rental Co. Serial # | 9/8/09 per 7369 1958°C NA | 1430 |
| Meter Type Hostifmentors Calibrated to Autoc pH = 4.00:3.98 Conductivity = 4.49 Turbidity Meter Comments: OACTON PH7-LOT 29 Meter Type | Manufacturer y s L al Solution Turbic SL = 4.490 Dissol 5557 = 9.95 06.508 = 7.01 Manufacturer La MaHa | Model Number 55でドアS Manufacture dity = <u>NA</u> ved Oxygen とそののはよる。 Model Number | Mfg. Serial# OFALTS 4 AO ET AUTICA ET AUTICA EN SOLÍN LOT 281 L Mfg. Serial# SN-ME14943 | Serial # NA Lot Numb Temperature = Salinity = 251 © 07/L = 0 +228 V 2 Rental Co. Serial # | 9/8/09 per 7.359 19.58°c NA 226.8 NV Date 9/1/09 | 1430 Time |
| Meter Type Hostifee Antice Calibrated to Autoc pH = 4.00: 3.98 Conductivity = 4.49 Turbidity Meter Comments: OACTON PH7-LOT 29 Meter Type Turbidicale | Manufacturer Y > I al Solution Turbic SL = 4.490 Dissol SSC 7 = 9.95 DSSC 7.01 Manufacturer La Malla. al Solution | Model Number 557 MPS Manufacture dity =NA ved Oxygen LEED PRIES Model Number LOGGE Manufacture | Mfg. Serial# OFALTS 4 AO ET AUTICA ET AUTICA EN SOLÍN LOT 281 L Mfg. Serial# SN-ME14943 | Serial # NA Lot Numb Temperature = Salinity = 251 © Org/L = 0 -228 U 2 Rental Co. Serial # | 9/8/09 per 7369 1958°c NA 2005-2 226.8 n.V Date 9/1/09 | Time |
| Meter Type Hostifacantage Calibrated to Autoc pH = 4.00: 3.98 Conductivity = 4.49 Turbidity Meter Comments: OACTON PH7-LOT 29 Meter Type Turbidiantage Calibrated to Autoc | Manufacturer Y > I al Solution Turbic S/_ = 4.490g Dissol 5557 = 9.95 06.508 = 7.01 Manufacturer La Matte al Solution Turbic | Model Number 557 MPS Manufacture dity =NA ved Oxygen LEED PRIES Model Number LOGGE Manufacture | Mfg. Serial# 06 A 168 4 A O er Aurical = 6.00 20.00 | Serial # NA Lot Numb Temperature = Salinity = 251 Oy/2 = 0 +228 V 2 Rental Co. Serial # NA Lot Numb Temperature = | 9/8/09 per 7369 1958°c NA 2005-2 226.8 n.V Date 9/1/09 | Time |
| Meter Type Holfife Cancer Calibrated to Autoc pH = 4.00:3.98 Conductivity = 4.49 Turbidity Meter Comments: OALTON PH7-LOT 29 Meter Type Turbidicale Calibrated to Autoc pH = | Manufacturer y s L al Solution Turbic SL = 4.490 Dissol 5557 = 9.95 06.508 = 7.01 Manufacturer La Matte Dissol O 0 = 0.0 | Model Number 557 MPS Manufacture dity = NA ved Oxygen LEED TYPE Model Number ZOZOE Manufacture dity = | Mfg. Serial# 06 A 168 4 A 0 The serial A 16 A 1 | Serial # NA Lot Numb Temperature = Salinity = 251 Oy/2 = 0 +228 V 2 Rental Co. Serial # NA Lot Numb Temperature = | Date 9/0/09 | Time |

| | | | | D 1-1-0- | | |
|--|-------------------------------|---------------------|-----------------------------|-------------------------------|---------------------------|-------------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| MULTIPARPMETER | YSI | 556 MPS | OGA1684AC | NA | 9/2/09 | 1430 |
| Calibrated to Autoc | al Solution | Manufacture | r Aurical | Lot Numb | er <u>735</u> | 9 |
| pH = 4.00 = 4.02 | Turbic | dity = NA | | Temperature = | 18.62 | - |
| Conductivity = 4 <u>.49</u> | 5/4~=4.492\$Dissol | ved Oxygen | = <u>600 mjll=</u> | Salinity = | NA | - |
| Turbidity Meter | | | | | | |
| Comments: Oakton 1410 Lot 2 GAKTON PH7 LOT 2 | | | 0140EN 50K'N 220_V=2271 | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Turbidimeter | LaMeette | 7020e | SN-ME 14943 | NA | 912/69 | 1940 |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | oer | |
| pH = | Turbic | dity = | | Temperature = | | _ |
| Conductivity = | Dissol | lved Oxygen | | _ Salinity = | | |
| Turbidity Meter | 0,0 = 0.0 | 40=1.1 | 10.0=10.09 | | | |
| Comments: AMED T | 1002 tolarder | 10.10 107 | U LOT PRAZZA | + | | |
| Amco | Torbody Meder | 1.0 NT | U LOT P9948 | 75 | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| MULTIPARAMETER | YSP | 556H15 | 06A1684AC | NA | 9/3/09 | 1420 |
| Calibrated to Autoc | cal Solution | Manufactur | er <u>Aurical</u> | Lot Numi | ber <u>738</u> | 79 |
| pH = 4.00 - 3.99 | Turbi | dity = 🔥 | | Temperature = | | |
| Conductivity = 4,44 | <i>Sla=4.</i> 493S/_Disso | lved Oxygen | = 0.00-16=0.0 | = Salinity = | · NA | |
| Turbidity Meter | | | | | | |
| Comments: GAKTON PH/O LOT OAKTON PH 7 LOT | 7105557-/0.03 7106507-7.01 | ZSKO (| 5XY4EN 50L6 7 EBUV2225.3 | 2712515 0.00° 27 LOT 19072 | 7/2 = 0.03 76-26RE/LLS | K SOUN |
| Matau Tana | N | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type Turbado eler | Manufacturer La Melle | 7070e | SN-NE 14143 | | 9/3/09 | 1455 |
| Calibrated to Autoo | | Manufactur | | Lot Num | | |
| pH = | | idity = | | Temperature = | | |
| Conductivity = | | lved Oxygen | | | = | |
| | Disso | | | | | |
| Turbidity Meter | 0.0=0.0 | 1.0=1.1 | T | | | |
| Turbidity Meter Comments: AMCO T | 0.0=6.0 | 1.0=1.1 5 NTV LO | | | | |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|---|---|--|--|--|--|------------------|
| MULTIPARAMETER | | | 06A1684AC | | 7/8/09 | |
| Calibrated to Autoca | | Manufacture | | Lot Numb | | |
| | Turbio | | | Temperature = | | • |
| Conductivity = 4.49 | | | | | • | |
| Turbidity Meter | | | | | | |
| Comments: OACTON PHIO COT Z OFKTON PH 7 LOT | 905557-10,01 29 ⁰⁶⁵⁸ -17,06 | ZEA6 ORPADS | 0x46EN 50L/N 3LV= 227.In | 2817515 0. V LOT 190 | 60-1/2 =0.00 7276 ZOOF | 3-1/2 45 50/2 |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Tubidineter | LaMotte | 20202 | SN-ME 14943 | NA | 9/8/09 | 1435 |
| Calibrated to Autoc | al Solution | Manufacture | | Lot Numb | | |
| pH = | Turbi | dity = | | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen | <u> </u> | Salinity = | | - |
| Turbidity Meter | 0.0 <0.0 | 1.0=1.03 | 10.0=10.05 | | | |
| Comments: AMCO T | oilidinates 10 | .0 NTU . | LOT 189123 | of the same of the | | |
| AMCO. | Torbidater 10 | NTU | LOT P9948- | 75 | | |
| | | | | - | | , |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type MILTIPALAMETER | Manufacturer YSI- | 1 | Mfg. Serial# | l . | Date 9/9/99 | ·· |
| | YSI | Number | OBALISTAC | Serial # | 9/9/29 | 1320 |
| MINITIPALAHETER. | YSI- | Number 536 MPS | OBALISTAC | Serial # | 9/9/ng per 135 | 1320 |
| MINITIPALAMETER. Calibrated to Autoc | ral Solution Turbi | Number 536 MPS Manufacture dity = NA | er Ausical | Serial # Lot Numl Temperature = | 9/9/99 per 135 20,36 | 1320 |
| MINITIPALAMETER Calibrated to Autoc pH = 4.00:4.01 | ral Solution Turbi | Number 536 MPS Manufacture dity = NA | er Ausical | Serial # Lot Numl Temperature = | 9/9/99 per 135 20,36 | 1320 |
| MINITIPALAMETER. Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.49 Turbidity Meter Comments: | ral Solution Turbi | Number 536 MPS Manufacture dity = NA Ived Oxygen | er Ausical | Serial # Lot Numl Temperature = Salinity = | 9/9/99 Der 135 20,36 NA | 1320 |
| MINITIPALAMETER. Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.49 Turbidity Meter Comments: | Sal Solution Turbi San - 44M San Disso | Number 536 MPS Manufacture dity = NA Ived Oxygen | = 0.00/L-0.05 | Serial # Lot Numl Temperature = Salinity = | 9/9/99 Der 135 20,36 NA | 1320 |
| MINITIPALIMETER. Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.49 Turbidity Meter Comments: OAKTON pH 7 Meter Type | Sal Solution Turbi Sh. 44 M. Disso LOT 290658 7. Manufacturer | Number 536 MPS Manufacture dity = NA Ived Oxygen OC 2EO ORP Model Number | = 0.00y/L-0.05. | Serial # Lot Numl Temperature = Salinity = | 9/9/99 Der 135 20.36 NA | 1320 9 |
| MILTIPALAMETER. Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.41 Turbidity Meter Comments: OAKTON pH 7 | al Solution Turbi Sh. 4490 Jn. Disso LOT 2905557-10. Manufacturer L.M. Halla. | Number 536 MPS Manufacture dity = NA Ived Oxygen OC 2EO ORP Model Number | E DXYGEN SOL'A Mfg. Serial# SN-648 14943 | Serial # Lot Numb Temperature = Salinity = 2852525 C Lot 19672 Rental Co. Serial # | 9/9/09 Der 135 20.36 NA NA Date 9/9/09 | /320 7 |
| MINITIPALMETER. Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.47 Turbidity Meter Comments: OAKTON pH 70 Meter Type | al Solution Turbi Sh. 4490 Jh. Disso LOT 290658 > 7. Manufacturer Low Here Cal Solution | Number 336 MPS Manufacture dity = NA lved Oxygen Model Number | = 0.00y/L-0.05. = 0.00y/L-0.05. = 0.00y/L-0.05. E 0xyGEN SOLA 228LN z Z26.9 LN Mfg. Serial# SN-618 14943 er | Serial # Lot Numb Temperature = Salinity = 28; 28; 25; 6 Lot Numb Temperature = Reperature = Reperature = Salinity = | 9/9/99 Der 135 20.36 NA Date 9/9/09 ber | 1320 7 |
| MILTIPALMETER. Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.47 Turbidity Meter Comments: OAKTON pH 7 Meter Type Turbiding for Calibrated to Autoc | Sal Solution Turbi Sh. 44 M.J. Disso LOT 290658 7. Manufacturer L.M.J. Cal Solution Turbi | Number 536 MPS Manufacture dity = NA Ived Oxygen Model Number Manufacture | = 0.00/L-0.05. = 0.00/L-0.05. = 0.00/L-0.05. DXYGEN SOLA 228LV = 226.9 L Mfg. Serial# SN-61F 1494-3 er | Serial # Lot Numl Temperature = Salinity = 28; 25:5 c Lot 196 72 Rental Co. Serial # Lot Numl Temperature = | 9/9/99 Der 135 20.36 NA Date 9/9/09 ber | /320 7 |
| Calibrated to Autoc pH = 4.00:4.01 Conductivity = 4.41 Turbidity Meter Comments: OAKTON pH 7 Meter Type Turbiding to Autoc pH = | Sal Solution Turbi Sh. 44M h Disso LOT 2906587-10. Manufacturer LAMARICAL DISSO Manufacturer Lamarical Solution Turbi Disso O O O O O | Number 336 MPS Manufacture dity = NA Ived Oxygen Model Number Manufacture didity = Sived Oxygen | = 0.00/L-0.05 = 0.00/L-0.05 = 0.00/L-0.05 = 0.00/L-0.05 = 0.00/L-0.05 Mfg. Serial# SN-61F 14943 er = | Serial # Lot Numl Temperature = Salinity = 28; 25:5 c Lot 196 72 Rental Co. Serial # Lot Numl Temperature = | 9/9/99 Der 135 20.36 NA Date 9/9/99 Der 20/9/09 | 1320 9 |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|--|--|---|--|--|---|
| HULTIPALAMETER | YSI | 556 MPS | C6A1684AC | NA . | 9/10/09 | 1110 |
| Calibrated to Autoc | al Solution | Manufacture | er Acricel | Lot Numb | er <u>735</u> | 9 |
| oH = 4.00:3,92 ∵ | | • | | Temperature = | | |
| Conductivity = 4 <u>Au</u> S | <u> </u> | lved Oxygen : | = 0.00-12-0.0 | ഗ _് ∠Salinity = | NS | _ |
| Turbidity Meter | | | | | | |
| Comments: ONKTON PH 10 OAKTON PH 7 | LOT 2905557-9. | .94 Z 21 Ot | ERO OEYEENSE RP=ZZ8_U=Z3C | 16'N 281281 DENV LOT | 1702278 | COBRUÍS SOC. |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Turbidineter | KAMOTTE | 2020e 556 M13/8 | SN-194-14-943 | NA | 9/10/09 | 1120 |
| Calibrated to Autoc | | Manufacture | | Lot Numb | | |
| oH = | Turbi | dity = | | Temperature = | * | |
| Conductivity = | Disso | lved Oxygen | = . | Salinity = | | _ |
| Turbidity Meter | 0,020,0 | 10=134 | 10=10.31 | | | |
| Comments: AMCO TO | | | | | L | |
| | rbidhelev 1.0 A | | | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| MULTIPARAMETER | YSE | 556 MPS | 06A1684AC | NA | 9hnlog | 0740 |
| Calibrated to Autos | al Solution | Manufacture | er Aurical | Lot Numb | oer <u>1733</u> | 37 |
| Cambrated to Autoc | | :d:E | | - | 75 | |
| • | Turbi | idity = N | Point. | remperature = | 20,31 | _ |
| pH = 400=4.02 | | | | | | - |
| pH = <u>400 = 4.02</u> Conductivity = <u>4.49</u> | | | | | | _ _ _ |
| pH = <u>400 = 4.02</u> Conductivity = <u>4.49</u> Turbidity Meter Comments: OAKTON | î.Sk.AA&&Disso | olved Oxygen | = 0.00 JL=0 | Salinity = | NA SOL'N 2513 | - 55 6.W.=00 |
| pH = <u>400-4.02</u> Conductivity = <u>4,44</u> Turbidity Meter Comments: _{OAKTON} | 1 pH 10 LOT 20 | olved Oxygen | = 0,00 pl=0 | Salinity = | NA SOL'N 2513 | - 55 6.W.=00 |
| pH = <u>400 = 4.02</u> Conductivity = <u>4.49</u> Turbidity Meter Comments: OAKTON Meter Type | PH 10 LOT 29 Manufacturer | 0 o s s s 7 - 10 o s s s s 7 - 10 o s s s s 7 - 10 o s s s s s 7 | = 0.00 JL=0 | Salinity = CONYCEN 28, W= 226 9, W Rental Co. Serial # | NA SOL'N 2812 LOT 19072 | 25 6.W2500 X6 7548 SOLL |
| pH = <u>400 = 4.02</u> Conductivity = <u>4.49</u> Turbidity Meter Comments: OAKTON | Manufacturer | Number | = 0 00 JL=0 201 ZEI 206 DRP: 2 Mfg. Serial# SN-Me\4943 | PO OXYGEN 28 WEZZG 9 W Rental Co. Serial # | NA SOL'N 2812 LOT 19072 Date | 75 6.00,500 76 75 25 25 25 25 25 25 25 25 25 25 25 25 25 |
| Turbidity Meter Comments: OAKTON Meter Type Turbidiated to Autoo | Manufacturer La Molle cal Solution | Model Number | = 0 00 JL=0 22 JR 22 Mfg. Serial# 5N-Me\4943 | PO OXYGEN 28 WEZZG 9 W Rental Co. Serial # | 50L'N 2812 Lot 5072 Date 9/4/04 | Time |
| pH = 400-4.02 Conductivity = 4.49 Turbidity Meter Comments: OAKTON Meter Type | Manufacturer La Molle cal Solution Turbi | Model Number Manufacture | = 0 00, 14-0 201 22 206 0RP : 2 Mfg. Serial# 5N-Me\4943 er | Rental Co. Serial # Lot Numl Temperature = | 50L'N 2812 Lot 5072 Date 9/4/04 | Time |
| Turbidity Meter Comments: OAKTON Meter Type Turbidia tex Calibrated to Autoc pH = | Manufacturer La Molle cal Solution Turbi Disso | Model Number Manufacture didity = | = 0.00, 11.00 2.01 22 2.06 029:2 Mfg. Serial# 5N:Mc\4943 er = | Rental Co. Serial # Lot Numl Temperature = | Date 9/4/04 | Time |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|---|---|---|--|---|--|
| MULTIPARAMETER | YS D | 537495 | 66A1684AC | NA " | 9/19/09 | 0700 |
| Calibrated to Autoc | al Solution | Manufacture | er Austral | Lot Numb | er <u>73</u> 5 | 7 |
| pH = <u>41039</u> 6 | Turbi | dity = <u><i>NA</i></u> | *************************************** | Temperature = | 18,34 | |
| Conductivity = <u>4.41</u> | Lead 43 Dissol | lved Oxygen | = 0,00,/1=0a | Salinity = | NE | |
| Turbidity Meter | | | | | | |
| Comments: 29 | 9.97 | 2500 | 0xy6EN SIL'N 2 8-V= 227.6 | 812515 6.00- | 1 = aayl | sda |
| 04K10NPH 7607 2406503 | 7,06 | 0 RP=28 | 8-1= 30 1.6 | | 373% Zo | BEZLÍSSON |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Torbidineter | La Motte | 2020e | SN-Me 1443 | NA | 9/19/09 | 0715 |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | - |
| Conductivity = | Disso | lved Oxygen | | Salinity = | | - · |
| Turbidity Meter | 0.0=0.0 | 1.0=1.10 | 10.0=9.86 | | | |
| Comments: AMCO Turbidinatur | 10.6 Ngu LOT 6 | 797234 | | | | |
| AMCO Torbilizetas | 1.01010 201 1 | 1 178 13 | | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | † · Time |
| Meter Type | | Model | Mfg. Serial# | Serial # | Date | |
| Meter Type | Manufacturer YSIZ | Model Number | 06A168AAC | Serial # | 9/15/09 | 0615 |
| Meter Type Multipurameter Calibrated to Autoc pH = 400-3.98 | Manufacturer ysz al Solution Turbi | Model Number 556/45 Manufacture | OLA 168 AAC er <u>Auricel</u> | Serial # //A Lot Numb Temperature = | 9//S/09 per73.5 19.0£ | 0615 |
| Meter Type Multipur ameter Calibrated to Autoc | Manufacturer ysz al Solution Turbi | Model Number 556/45 Manufacture | OLA 168 AAC er <u>Auricel</u> | Serial # //A Lot Numb Temperature = | 9//S/09 per73.5 19.0£ | 0615 |
| Meter Type Multipurameter Calibrated to Autoc pH = 400-3.98 | Manufacturer ysz al Solution Turbi | Model Number 556/45 Manufacture | OLA 168 AAC er <u>Auricel</u> | Serial # //A Lot Numb Temperature = | 9//S/09 per73.5 19.0£ | 0615 |
| Meter Type Multiper ameter Calibrated to Autoc pH = 400-3.98 Conductivity = 4,49 Turbidity Meter | Manufacturer ySTE al Solution Turbi | Model Number 556MS Manufacture dity = 100000000000000000000000000000000000 | er Avriced = 0.06 yll 6.03 | Serial # //A Lot Numb Temperature = | 9//5/09 Der 733 19.06 NA | 06/5 |
| Meter Type Moltipus ameter Calibrated to Autoc pH = 4.00 = 3.98 Conductivity = 4.49 Turbidity Meter Comments: OAKETON | Manufacturer ySTE al Solution Turbi | Model Number 556/4/5 Manufacture dity = N | = 0.06 y/6.03 | Serial # NA Lot Numb Temperature = Salinity = | 9/15/09 Der 735 19.06 NA | 0615 |
| Meter Type Motting ameter Calibrated to Autoc pH = 400=3.98 Conductivity = 4,49 Turbidity Meter Comments: Operation | Manufacturer yST al Solution Turbi AARSADisso | Model Number 556/4/5 Manufacture dity = N | = 0.06 mylli 6.03 m = 0.06 mylli 6.03 m C 25 RO 78 08 P = 229 m/2 | Serial # NA Lot Numb Temperature = Salinity = | 9/15/09 Der 735 19.06 NA | 0615 |
| Meter Type Motting ameter Calibrated to Autoc pH = 4.00 = 3.98 Conductivity = 4.49 Turbidity Meter Comments: Operation Operation Meter Type | Manufacturer ySI al Solution Turbi AAAAAAABbisso PH 10 LOT 27 | Model Number 556/45 Manufacture dity = 1000 Nodel | ## Avical = 0.06 y/h 6.3 3 C 2500 78 @P:229.V: Mfg. Serial# | Serial # NA Lot Numb Temperature = Salinity = 6×YGEN SOLO 227.6NV LOT Rental Co. | 9/15/09 per 733 19.06 NA 2212550 1707276 20 | 0615 0,000 / = 0,00 / 8416'S Sour |
| Meter Type Motting ameter Calibrated to Autoc pH = 4.00 = 3.98 Conductivity = 4.49 Turbidity Meter Comments: Operation Operation Meter Type | Manufacturer ySI al Solution Turbi AAGUSDISSO PH 10 LOT 27 WPH 7 LOT 2 Manufacturer LaMoHe | Model Number 556/45 Manufacture dity = Note Number | DLAIGRAAC er Avrical = 0.06 y/h/b/b/3 C 2500 78 CRP:228-V: Mfg. Serial# 57 Me MS | Serial # NA Lot Numb Temperature = Salinity = 6KYCEN SOCO 227.GN LOT Rental Co. Serial # | 9 / /S/09 Date | 0615 57 5,00-1.00,003 841/3 5000 Time |
| Meter Type Multiper ameter Calibrated to Autoc pH = 400=3.98 Conductivity = 4,49 Turbidity Meter Comments: OAKTON Meter Type Turbidity Meter | Manufacturer ySTE al Solution Turbi AAAAAADbisso PH 10 LOT 27 W PH 7 LOT 2 Manufacturer LMoHe cal Solution | Model Number 556/45 Manufacture dity = Note lived Oxygen Model Number 7626e | DEATERACE Adviced = 0.06 m/L 0.03 m C 2500 FR ORP:228 W: Mfg. Serial# 54 Me Mass er | Serial # NA Lot Numb Temperature = Salinity = 6KYCEN SOCO 227.GN LOT Rental Co. Serial # | 9 / 15/09 per 73 S 19, 06 NA 221 2515 0 175 727 6 20 Date 7 / 15/09 per | 0615 5.00-1.000g 8411/3 500- |
| Meter Type Motting ameter Calibrated to Autoc pH = 400=3.98 Conductivity = 4.49 Turbidity Meter Comments: Operation Operation Meter Type Turbidity Meter Calibrated to Autoc | Manufacturer yST al Solution Turbi AARSDisso PH 10 LOT 27 WPH 7 LOT 2 Manufacturer LMoHe cal Solution Turbi | Model Number 556/45 Manufacture dity = 1000 lived Oxygen Model Number 70262 Manufacture | ## Adviced = 0.06 myllo 6.03 m C 2500 FR 000 PR 2229 M2 Mfg. Serial# STM-Me. Mass er | Serial # NA Lot Numb Temperature = Salinity = 6×YGEN SOUN 227.GN LOT Rental Co. Serial # NA Lot Numb Temperature = | 9 / 15/09 per 73 S 19, 06 NA 221 2515 0 175 727 6 20 Date 7 / 15/09 per | 0615 57 5,00 1 = 0,00 y 8411/3 Sour Time |
| Meter Type Motting ameter Calibrated to Autoc pH = 400-3.98 Conductivity = 4,49 Turbidity Meter Comments: Only Comments: Meter Type Turbidity Meter Calibrated to Autoc pH = | Manufacturer ySI al Solution Turbi AAIZSDisso PH 10 LOT 27 W pH 7 LOT 2 Manufacturer LAMOHE cal Solution Turbi Disso | Model Number 556/45 Manufacture dity = | DLAIGRAAC Per Avrical = 0.06 y/h/b/b/3 C 2500 78 CRP:228-V: Mfg. Serial# 57 Me S Per | Serial # NA Lot Numb Temperature = Salinity = 6×YGEN SOUN 227.GN LOT Rental Co. Serial # NA Lot Numb Temperature = | 9 / /5/09 Date 9 / /5/09 Poer | 0615 59 5,00 1 = 0,00 y 8411/3 Sour Time |

| | | Model | | Rental Co. | | |
|--|--|--|--|--|---------------------------------------|---------------------------------------|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| MULTIPARAMETER | YSI | 656 MPS | 06A1694AC | NA | 9/16/00 | 0695 |
| Calibrated to Autoc | al Solution | Manufacture | r Aurical | Lot Numb | er <u>7369</u> | · · · · · · · · · · · · · · · · · · · |
| pH = 4.00:4.05 | Turbi | dity = <i>NA</i> | | Temperature = | 21,06 | |
| Conductivity = 4.497 | S/c =4.496 & Dissol | lved Oxygen | = 0,00m/2005; | Salinity = | MA | |
| Turbidity Meter | | | | | | |
| Comments: | N 10 LOT 2905557 | 1 - 10,09 8 - 210 | | 06% 2812515 06% 2812515 | | |
| | | Model | | Rental Co. | Dut | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Turbidineter | LaMothe | roroe | SN-Me 14903 | NA | 9/16/09 | 07/0 |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | oer | ···· |
| pH = | Turbi | dity = | | Temperature = | | • |
| Conductivity = | Disso | lved Oxygen | = | Salinity = | | - |
| Turbidity Meter | 0.0 > 6.0 | 1.0=1.11 | 10.0=10.21 | | | |
| Comments: Amco to | orbidimeter 10.0 | NTU LOT | - P891284 | | | 1 |
| AMCO T | or bidingter 1.0 | NTU LOT | - 9994875 | | | / |
| | | | | | , f | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| - Mi Hiparamite | Manufacturer | l . | Mfg. Serial# | Serial # | Date / | Time |
| Calibrated to Autoc | Manufacturer VST cal Solution | Number 556MPS Manufacture | OBAILOHAC | Serial # NA Lot Numl | 9/zi/09 | |
| Calibrated to Autoc | Manufacturer VST cal Solution | Number 556MPS Manufacture | OBAILOHAC | Serial # | 9/zi/09 | |
| Torbidity | Manufacturer VST cal Solution 7.03 10.05 Turbi | Number 556MPS Manufacture | ObA160HAC | Serial # NA Lot Numl Temperature = | 9/zi/09 | 0514 |
| Calibrated to Autoc pH = 3.99 7.0 | Manufacturer VST cal Solution 7.03 10.05 Turbi | Number 556MPS Manufacture idity = | ObA160HAC | Serial # NA Lot Numl Temperature = | 9/zi/09 per 141, 23 | 0514 |
| Calibrated to Autoo pH = 3.99 7.0 Conductivity = 4.5 | Manufacturer VST cal Solution 7.03 10.05 Turbi | Number 556MPS Manufacture idity = | ObA160HAC | Serial # NA Lot Numl Temperature = | 9/zi/09 per 141, 23 | 0514 |
| Calibrated to Autoc pH = 3.99 7.0 Conductivity = 4.5 Turbidity Meter | Manufacturer VST cal Solution 7.03 10.05 Turbi | Number 556MFS Manufacture idity = blved Oxygen | ObA160HAC | Serial # NA Lot Numl Temperature = Salinity = | 9/zi/09 per 141, 23 | 0514 |
| Calibrated to Autoc pH = 3.99 7.0 Conductivity = 4.5 Turbidity Meter | Manufacturer VST cal Solution 7.03 10.05 Turbi | Number 556MPS Manufacture idity = | ObA160HAC | Serial # NA Lot Numl Temperature = | 9/zi/09 per 141, 23 | 0514 |
| Calibrated to Autoc pH = 3.99 7.0 Conductivity = 4.5 Turbidity Meter Comments: | Manufacturer VST cal Solution 7.03 10.05 Disso | Number 556MPS Manufacture didity = blved Oxygen Model Number | 06A16CHAC | Serial # NA Lot Numl Temperature = Salinity = | 9/zi/09 per /4), 23 | 0514 |
| Calibrated to Autoc pH = 3.99 7.0 Conductivity = 4.5 Turbidity Meter Comments: | Manufacturer VST cal Solution 7.03 10:05 Disso Manufacturer LaMothe | Number SSEMPS Manufacture idity = blved Oxygen Model Number | Mfg. Serial# | Serial # NA Lot Numl Temperature = Salinity = Rental Co. Serial # | 9/21/09 per [4], 23 Date [7/21/09 | OSI4 |
| Calibrated to Autoo pH = 3.99 7.00 Conductivity = 4.5 Turbidity Meter Comments: Meter Type Turbidity Autoo pH = 3.99 | Manufacturer VST cal Solution Turbi Manufacturer LaMotte cal Solution Turb | Model Number | 06A1601AC er = Mfg. Serial# Me 19943 er | Serial # NA Lot Numl Temperature = Salinity = Rental Co. Serial # | 9/zi/09 per | 7ime |
| Calibrated to Autoo pH = 3.99 7.0 Conductivity = 4.5 Turbidity Meter Comments: Meter Type Turbid ty Calibrated to Autoo | Manufacturer VST cal Solution Turbi Manufacturer LaMotte cal Solution Turb | Model Number Model Number Start S Manufacture | 06A1601AC er = Mfg. Serial# Me.14943 er | Serial # NA Lot Numl Temperature = Salinity = Rental Co. Serial # NO Lot Num Temperature = | 9/zi/09 per | 7ime |
| Calibrated to AutocopH = 3.99 7.00 Turbidity Meter Comments: Meter Type Turbidity AutocopH = 3.99 | Manufacturer VST cal Solution 7.03 Disso Manufacturer LaMotte cal Solution Turb 7.03 Disso Turb Turb Turb Turb Turb Turb | Model Number Model Number State St | Obarbotac Obar | Serial # NA Lot Numl Temperature = Salinity = Rental Co. Serial # NO Lot Num Temperature = Salinity = | 9/zi/09 ber | 7ime |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|---|--|--|-------------------------------|--|---------------|---------|
| Multiparander | YSI | 556 MS | OCA1484AC | NA | 9/24/09 | 07/5 |
| Calibrated to Autoc | al Solution | Manufacture | er Aurical | Lot Numb | er <u>735</u> | 9 |
| oH = 4,00-4-02 | Turbi | dity = <u><i>NA</i></u> | | Temperature = | | |
| Conductivity = 4.496 | Veni 4.49 Disso | lved Oxygen | = 0.00 y/2 = 0 | Obj Salinity = | NA | |
| Turbidity Meter | | | | | | |
| Comments: OAKTON PH 10 OAKTON PH 7 | LOT 2905557 =/ | 0.06 7.06 | ZERO OXYGEN OLP = ZZ8ml | SOL'N 2817 1 = 2301 LC | 2515 0.00g | 16 29gu |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Mulbidador | Larotte | 2020e | SN-Me14943 | NA | 9/24/34 | 0730 |
| Calibrated to Autoc | al Solution | Manufacture | * | Lot Numb | | |
| oH = | Turbi | dity = | - | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen | | Salinity = | | - |
| Turbidity Meter | 0.0=0.0 | 20= | 10,0 | | | |
| AMCO | To/bidirely | 1.0 COT PG | 61275 | | | |
| | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | | Model | | | Date | Time |
| | Manufacturer | Model | Mfg. Serial# | | | Time |
| Meter Type Calibrated to Autoc | Manufacturer | Model Number Manufacture | Mfg. Serial# | Serial # | | Time |
| Meter Type Calibrated to Autoc pH = | Manufacturer al Solution | Model Number Manufacture | Mfg. Serial# | Serial # Lot Numb Temperature = | | |
| Meter Type Calibrated to Autoc pH = Conductivity = | Manufacturer al Solution | Model Number Manufacture | Mfg. Serial# | Serial # Lot Numb Temperature = | per | |
| Meter Type Calibrated to Autoc pH = Conductivity = Turbidity Meter | Manufacturer al Solution | Model Number Manufacture | Mfg. Serial# | Serial # Lot Numb Temperature = | per | |
| Meter Type Calibrated to Autoc pH = Conductivity = Turbidity Meter | Manufacturer al Solution | Model Number Manufacture | Mfg. Serial# | Serial # Lot Numb Temperature = | per | |
| Meter Type Calibrated to Autoc pH = Conductivity = Turbidity Meter | Manufacturer al Solution | Model Number Manufacture idity = olved Oxygen | Mfg. Serial# | Serial # Lot Numl Temperature = Salinity = | per | |
| Meter Type Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: Meter Type | Manufacturer al Solution Turb Disso | Model Number Manufacture idity = olved Oxygen | Mfg. Serial# | Serial # Lot Numl Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Meter Type Calibrated to AutocopH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoco | Manufacturer al Solution Turb Disso | Model Number Manufacture idity = olved Oxygen Model Number | Mfg. Serial# er Mfg. Serial# | Serial # Lot Numl Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Meter Type Calibrated to AutocopH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to AutocopH = | Manufacturer al Solution Turb Disso Manufacturer cal Solution Turb | Model Number Manufacture idity = olved Oxygen Model Number | Mfg. Serial# er Mfg. Serial# | Serial # Lot Numl Temperature = Salinity = Rental Co. Serial # Lot Numl Temperature = | Date | Time |
| Meter Type Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: Meter Type | Manufacturer al Solution Turb Disso Manufacturer cal Solution Turb | Model Number Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# er Mfg. Serial# | Serial # Lot Numl Temperature = Salinity = Rental Co. Serial # Lot Numl Temperature = | Date | Time |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|------------------------------|--------------------------------|--------------|---|-------------|----------|
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| B# . (T | | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Manufacturer | Number | ing. ochair | OCHAI II | Duto | Title |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | | dity = | | Temperature = | | |
| Conductivity = | | lved Oxygen : | | . | | _ |
| | T | | | | | T |
| Turbidity Meter | | | | | | <u> </u> |
| Comments: | | | | | | |
| | 1 | Model | ļ: | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | er | |
| pH = | Turb | idity = | | Temperature = | | _ |
| Conductivity = | | | | | | |
| | | olved Oxygen | | _ Salinity = | <u></u> | _ |
| Turbidity Meter | Disso | olved Oxygen | | _ Salinity = | | |
| | Disso | olved Oxygen | | _ Salinity = | | |
| Turbidity Meter | Disso | | | | | |
| Turbidity Meter Comments: | | Model | | Rental Co. | | |
| Turbidity Meter | Manufacturer | | Mfg. Serial# | | Date | Time |
| Turbidity Meter Comments: | Manufacturer | Model | Mfg. Serial# | Rental Co. | Date | Time |
| Turbidity Meter Comments: Meter Type Calibrated to Autoc | Manufacturer cal Solution | Model Number Manufacture | Mfg. Serial# | Rental Co. Serial # | Date per | Time |
| Turbidity Meter Comments: Meter Type | Manufacturer cal Solution | Model Number | Mfg. Serial# | Rental Co. Serial # Lot Number Temperature = | Date per | Time |
| Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = | Manufacturer cal Solution | Model Number Manufacture | Mfg. Serial# | Rental Co. Serial # Lot Number Temperature = | Date per | Time |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|----------------------------------|---|--------------|--|------------|--------|
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | idity = | | Temperature = | | - |
| Conductivity = | Disso | lved Oxygen : | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | T | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | er . | Lot Numb | er | |
| pH = | Turbi | idity = | | Temperature = | | *** |
| Conductivity = | Disso | lved Oxygen : | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | T | Model | | Rental Co. | ~ | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | - Inarraraotaro | | | | | 111110 |
| 1110001 13 00 | manuadaro. | | | | | 111110 |
| Calibrated to Autoc | | Manufacture | er | Lot Numb | er | |
| | cal Solution | Manufacture | er | Lot Numb | er | |
| Calibrated to Autoc | cal Solution | | | Temperature = | er | |
| Calibrated to Autoc | cal Solution | idity = | | Temperature = | *** | |
| Calibrated to Autoc pH = Conductivity = | cal Solution | idity = | | Temperature = | *** | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter | cal Solution | idity = | | Temperature = | *** | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: | cal Solution Turbi Disso | idity = olved Oxygen : Model | | Temperature = Salinity = Rental Co. | | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter | cal Solution | idity = olved Oxygen : | | Temperature = Salinity = | *** | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: | cal Solution Turbi Disso | idity = olved Oxygen : Model | | Temperature = Salinity = Rental Co. | | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: | cal Solution Turbi Disso | idity = olved Oxygen : Model | Mfg. Serial# | Temperature = Salinity = Rental Co. | Date | Time |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: Meter Type | Manufacturer | Model Number | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # | Date er | Time |
| Calibrated to AutocopH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoc | Manufacturer cal Solution Turbi | Model Number Manufacture | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date er | Time |
| Calibrated to AutocopH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to AutocopH = | Manufacturer cal Solution Turbi | Model Number Manufacture | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date er | Time |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time | |
|---|---------------------------|--------------------------------|--------------|---|--------------|--------------|--|
| Calibrated to Autoc | al Solution | Manufacture | | Lot Numbe | or | | |
| | | | | Temperature = | | | |
| pH = | | dity = | | | | | |
| Conductivity = | Disso | lved Oxygen = | | Janiney _ | | 1 | |
| Turbidity Meter | | | | | | | |
| Comments: | | | | | | | |
| | | | | | | | |
| Motor Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time | |
| Meter Type | Walturacturer | Hums. | inigi oot | | | IIII | |
| O III stadita Autos | LO - losti - o | Manufacture | | L -4 Numb | | | |
| Calibrated to Autoc | | | Lot Number | | | | |
| | | dity = lved Oxygen = | | Temperature = _ | | | |
| Conductivity = | | iveu Oxygen - | | . Jannity . | | | |
| Turbidity Meter | | | | | | | |
| Comments: | | | | | | | |
| | | | | | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time | |
| | | | - | | | | |
| Calibrated to Autoo | | Manufacture | | Lot Numb | or | <u>,i</u> | |
| | | | :1 | | | | |
| pH = | Turni | idity = | | Temperature - | emperature = | | |
| la , ,, ,, _ | | | | Calinity m | | | |
| Conductivity = | | olved Oxygen | | Salinity = | | _ | |
| Conductivity = Turbidity Meter | | olved Oxygen | = | Salinity = | | _ | |
| | | olved Oxygen | | Salinity = | | | |
| Turbidity Meter | | olved Oxygen | | Salinity = | | | |
| Turbidity Meter | | Model | | Rental Co. | | | |
| Turbidity Meter | | | Mfg. Serial# | | Date | Time | |
| Turbidity Meter Comments: | Disso | Model | | Rental Co. | | | |
| Turbidity Meter Comments: | Manufacturer | Model | Mfg. Serial# | Rental Co. Serial # | | Time | |
| Turbidity Meter Comments: Meter Type | Manufacturer cal Solution | Model Number | Mfg. Serial# | Rental Co. Serial # | Date per | Time | |
| Turbidity Meter Comments: Meter Type Calibrated to Autor | Manufacturer cal Solution | Model Number Manufacture | Mfg. Serial# | Rental Co. Serial # Lot Numb Temperature = | Date per | Time | |
| Turbidity Meter Comments: Meter Type Calibrated to AutoopH = | Manufacturer cal Solution | Model Number Manufacture | Mfg. Serial# | Rental Co. Serial # Lot Numb Temperature = | Date per | Time | |

| | | Model | | Rental Co. | | |
|---|-----------------------------|---|---------------|--|------------|--------|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | | Lot Numb | er | |
| pH = | Turbid | lity = | | Temperature = | | |
| Conductivity = | Dissolv | ved Oxygen = | : | Salinity = | | |
| Turbidity Meter | | | | | | |
| Comments: | | | 1 | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | | Lot Numb | er | |
| pH = | Turbio | | Temperature = | | | |
| Conductivity = | Dissol | ved Oxygen = | | Salinity = | | - |
| Turbidity Meter | | | | | | : |
| Comments: | | <u>' </u> | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| Calibrated to Autoo | al Solution Turbio | | r | Lot Numb Temperature = | er | |
| pH = | Turbio | | | Temperature = | | - |
| pH = | Turbio | dity = | | Temperature = | er | - |
| pH = | Turbio | dity = | | Temperature = | | - - |
| pH = Conductivity = | Turbio | dity = | | Temperature = | | - |
| pH = Conductivity = Turbidity Meter | Turbio | dity = ved Oxygen = | | Temperature = Salinity = | | - |
| pH = Conductivity = Turbidity Meter Comments: | Turbio | dity = lved Oxygen : Model | = | Temperature = Salinity = | | |
| pH = Conductivity = Turbidity Meter | Turbio | dity = ved Oxygen = | | Temperature = Salinity = | | Time |
| pH = Conductivity = Turbidity Meter Comments: | Turbio Dissol Manufacturer | dity = ved Oxygen = Model Number | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # | Date | Time |
| pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoc | Manufacturer | dity = ved Oxygen : Model Number | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # | Date er | Time |
| pH = Conductivity = Turbidity Meter Comments: | Manufacturer cal Solution | dity = ved Oxygen = Model Number | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date er | Time |
| pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = Conductivity = | Manufacturer cal Solution | Model Number Manufacture | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date er | Time |
| pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = | Manufacturer cal Solution | Model Number Manufacture | Mfg. Serial# | Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date er | Time |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|---------------------------------|--|--------------|--|------|---------------------------------------|
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| оH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | • | | | | | |
| | _ | | | - Bontol Co. I | | T |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | er | · · · · · · · · · · · · · · · · · · · |
| pH = | Turbi | idity = | | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen | | _ Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | Data | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Manufacturer | 1 | Mfg. Serial# | 1 | Date | Time |
| | | 1 | | 1 | | Time |
| Calibrated to Autoc | cal Solution | Number | | Serial # | | Time |
| Calibrated to Autoc | cal Solution | Number Manufacture | | Serial # Lot Numb Temperature = | | |
| Calibrated to Autoc pH = Conductivity = | cal Solution | Number Manufacture | ег | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter | cal Solution | Number Manufacture | ег | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoc | cal Solution | Number Manufacture idity = blved Oxygen | ег | Serial # Lot Numb Temperature = Salinity = | er | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: | cal Solution Turbi Disso | Manufacture idity = blved Oxygen | er | Serial # Lot Numb Temperature = Salinity = | per | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter | cal Solution | Number Manufacture idity = blved Oxygen | er | Serial # Lot Numb Temperature = Salinity = | er | |
| Calibrated to Autoc pH = Conductivity = Turbidity Meter Comments: | Cal Solution Turbi Disso | Manufacture idity = blved Oxygen | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo | Manufacturer | Manufacture idity = olved Oxygen Model Number | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo | Manufacturer cal Solution Turb | Manufacture idity = blved Oxygen Model Number | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = | Manufacturer cal Solution Turb | Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date | Time |

| | | Model | | Rental Co. | | |
|---------------------------------|----------------------|-----------------|--------------|-------------------|------|---------------------------------------|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Number | er | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = _ | | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | Rental Co. | | r |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Serial # | Date | Time |
| того. Турс | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | · · · · · · · · · · · · · · · · · · · |
| pH = | Turbi | dity = | | Temperature = | • | |
| | | lved Oxygen | | - | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | 1 | | |
| | | | | | | |
| | | Model | | Rental Co. | | T . |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | cal Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turb | idity = | | Temperature = | | |
| Conductivity = | | - | | | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| | 1 | 1 | Mara Coriol# | | Date | Time |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | 11110 |
| | | Number | | | | |
| Meter Type Calibrated to Autor | | Number : | | Serial # | | |
| | cal Solution | | Pr | | er | |
| Calibrated to Autoo | cal Solution Turb | Manufacture | Pr | Lot Numb | er | |
| Calibrated to Autoo | cal Solution Turb | Manufacture | Pr | Lot Numb | er | |

| | | Model | | Rental Co. | | |
|--|---|---------------------------|-----------------------|---|-------------|--------------------------------------|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | * | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Number | er | |
| pH = | Turbic | dity = | | Temperature = | -14 | - |
| Conductivity = | Dissol | ved Oxygen = | · | Salinity = | | • |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | = | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbic | | Temperature = | | _ | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | | - |
| Touchidity Biotou | 1 | | | | | |
| Turbidity Meter Comments: | | | | | | |
| Comments: | | | | | | |
| | | | · | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| | | | | 7 | | |
| Calibrated to Autoc | ral Solution | Manufacture | r | Lot Numb | er | |
| 1 - 4 | | | | | | |
| nH = | | ditv = | | Temperature = | | · · · · · · · · · · · · · |
| pH = | Turbi | dity = | | Temperature = | | _ |
| pH = Conductivity = | Turbi | dity = | = | | | - |
| | Turbi | | = | | | |
| Conductivity = | Turbi | | = | | | |
| Conductivity = Turbidity Meter | Turbi | | = | | | |
| Conductivity = Turbidity Meter | Turbi | | | | | |
| Conductivity = Turbidity Meter | Turbi | lved Oxygen | = Mfg. Serial# | _ Salinity = | Date | Time |
| Conductivity = Turbidity Meter Comments: | Turbi Disso | lved Oxygen | | Salinity = | | |
| Conductivity = Turbidity Meter Comments: | Turbi Disso Manufacturer | lved Oxygen | Mfg. Serial# | Salinity = | Date | Time |
| Conductivity = Turbidity Meter Comments: Meter Type | Turbi Disso Manufacturer cal Solution | Model Number | Mfg. Serial# | Salinity = Rental Co. Serial # | Date per | Time |
| Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo | Manufacturer cal Solution Turbi | Model Number | Mfg. Serial# | Rental Co. Serial # Lot Numb Temperature = | Date per | Time |
| Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = Conductivity = | Manufacturer cal Solution Turbi | Model Number Manufacture | Mfg. Serial# | Rental Co. Serial # Lot Numb Temperature = | Date per | Time |
| Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = | Manufacturer cal Solution Turbi | Model Number Manufacture | Mfg. Serial# | Rental Co. Serial # Lot Numb Temperature = | Date per | Time |

| Meter Type Manufacturer Number Mfg. Serial# Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number H = | | | Model | | Rental Co. | | |
|--|---------------------|--------------|---------------|---|---------------------------------------|-------------|----------|
| Calibrated to Autocal Solution | Meter Type | Manufacturer | 1 1 | Mfg. Serial# | 1 1 | Date | Time |
| Dissolved Oxygen = Salinity = Sal | | | | _ | | | |
| Dissolved Oxygen = Salinity = Sal | | | | | | - | |
| Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Model | Calibrated to Autoc | cal Solution | Manufacture | r | | | |
| Turbidity Meter Comments: Meter Type | pH = | Turbi | dity = | | Temperature = _ | <u> </u> | - |
| Meter Type | Conductivity = | Disso | lved Oxygen = | = | Salinity = | | - |
| Meter Type | Turbidity Meter | | | | | | |
| Meter Type | | | | PRODUCTION OF THE PROPERTY OF | | | |
| Meter Type | | | | | | | · |
| Meter Type | | | Model | | Rental Co. | | |
| pH = Turbidity = Temperature = Salinity = Salinity = Turbidity Meter | Meter Type | Manufacturer | E :1 | Mfg. Serial# | 1 1 | Date | Time |
| pH = Turbidity = Temperature = Salinity = Salinity = Turbidity Meter | | | | | | | |
| pH = Turbidity = Temperature = Salinity = Salinity = Turbidity Meter | Calibrated to Auto | cal Solution | Manufacture | r | Lot Numb | er | <u> </u> |
| Conductivity = Dissolved Oxygen = Salinity = | H = | Turbi | dity = | | · · · · · · · · · · · · · · · · · · · | | |
| Turbidity Meter Comments: Meter Type | | | - | | | | |
| Meter Type Manufacturer Number Mfg. Serial# Rental Co. Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Meter Type Manufacturer Number Mfg. Serial# Rental Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number | | | 7 | | · · | | - 1 |
| Meter Type Manufacturer Model Number Mfg. Serial# Rental Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number | Turbidity Meter | | | | | | |
| Meter Type Manufacturer Number Mfg. Serial# Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Salinity = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Model Number Mfg. Serial# Rental Co. Serial# Date Time Calibrated to Autocal Solution Manufacturer Mfg. Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number PH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | Comments: | | | | | | |
| Meter Type Manufacturer Number Mfg. Serial# Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Salinity = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Model Number Mfg. Serial# Rental Co. Serial# Date Time Calibrated to Autocal Solution Manufacturer Mfg. Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number PH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | | | | | |
| Meter Type Manufacturer Number Mfg. Serial# Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Salinity = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Model Number Mfg. Serial# Rental Co. Serial# Date Time Calibrated to Autocal Solution Manufacturer Mfg. Serial# Date Time Calibrated to Autocal Solution Manufacturer Lot Number PH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | Model | | Rental Co. | | |
| pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Meter Type Manufacturer Number Mfg. Serial# Rental Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | Meter Type | Manufacturer | i . | Mfg. Serial# | l I | Date | Time |
| pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Meter Type Manufacturer Number Mfg. Serial# Rental Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | | | | | |
| pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Meter Type Manufacturer Number Mfg. Serial# Rental Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | Calibrated to Auto | cal Solution | Manufacture |). | Lot Numb | er | 4 |
| Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Comments: Model Number Mfg. Serial# Rental Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | | | | | |
| Turbidity Meter Comments: Meter Type | | | | | • | | - , |
| Comments: Model Rental Co. Serial # Date Time | Conductivity = | Disso | lved Oxygen | | _ Salinity = | | - |
| Comments: Model Rental Co. Serial # Date Time | Turbidity Meter | T | | | | | |
| Meter Type Manufacturer Model Number Mfg. Serial# Co. Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | <u> </u> | 4, | | <u> </u> | <u></u> |
| Meter Type Manufacturer Number Mfg. Serial# Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Turbidity Meter | | | | | | | |
| Meter Type Manufacturer Number Mfg. Serial# Serial # Date Time Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter Turbidity Meter | | 1 | Model | T | Bontal Co | | T |
| Calibrated to Autocal Solution Manufacturer Lot Number pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | Meter Type | Manufacturer | i | Mfg. Serial# | | Date | Time |
| pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | | | | | |
| pH = Turbidity = Temperature = Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | Calibrated to Auto | | Manufacture | | Lot Numb | <u> </u> | |
| Conductivity = Dissolved Oxygen = Salinity = Turbidity Meter | | | | | | ***** | |
| Turbidity Meter | | | | • | | | |
| | Conductivity = | Disso | olved Oxygen | | _ Salinity = | | |
| Comments: | Turbidity Meter | | | | | | |
| | | | | SAMPLE CONTRACTOR OF THE SAMPLE CONTRACTOR OF | | | |

| | 1 | | | DantalCa | | |
|---|---------------------------------------|--|---------------|---|---------|--------------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| motor Typo | | | <u> </u> | | - Paris | |
| | 1 | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen = | = | Salinity = | | _ |
| | | 1 | | | | 1 |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoo | ral Solution | Manufacture | | Lot Numb | er | |
| | | | | Temperature = | | |
| pH = | | dity = | - | | | |
| Conductivity = | DISSO | lved Oxygen | | _ Samily = | | |
| Turbidity Meter | | - | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | I | Rental Co. | | |
| | | 1 | | 1 | Doto | l <u>_</u> . |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Meter Type | Manufacturer | Number | Mitg. Serial# | Serial # | Date | Time |
| | | | | | | Time |
| Meter Type Calibrated to Auto | | Number Manufacture | | Serial # | | Time |
| | cal Solution | | | | | Time |
| Calibrated to Autoo | cal Solution | Manufacture | | Lot Numb | | |
| Calibrated to Autoo | cal Solution | Manufacture | er | Lot Numb | per | |
| Calibrated to Autoo | cal Solution | Manufacture | er | Lot Numb | per | |
| Calibrated to Autoo pH = Conductivity = | cal Solution | Manufacture | er | Lot Numb | per | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter | cal Solution | Manufacture | er | Lot Numb | per | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter | cal Solution | Manufacture | er | Lot Numb Temperature = Salinity = | per | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter | cal Solution | Manufacture | er | Lot Numb | per | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: | cal Solution Turb Disso | Manufacture idity = olved Oxygen | = | Lot Numb | per | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type | Cal Solution Turb Disso | Manufacture idity = olved Oxygen Model Number | Mfg. Serial# | Lot Numb Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo | Manufacturer | Manufacture idity = olved Oxygen Model Number | Mfg. Serial# | Lot Numb Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type | Manufacturer | Manufacture idity = olved Oxygen Model Number | Mfg. Serial# | Lot Number Temperature = Salinity = Rental Co. Serial # Lot Number Temperature = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo | Manufacturer cal Solution Turb Disso | Manufacture idity = olved Oxygen Model Number | Mfg. Serial# | Lot Number Temperature = Salinity = Rental Co. Serial # Lot Number Temperature = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = Conductivity = | Manufacturer cal Solution Turb Disso | Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# | Lot Number Temperature = Salinity = Rental Co. Serial # Lot Number Temperature = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = | Manufacturer cal Solution Turb Disso | Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# | Lot Number Temperature = Salinity = Rental Co. Serial # Lot Number Temperature = | Date | Time |

| | | Model | | Rental Co. | | |
|---------------------|--|-----------------|----------------------|---|--|--|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | | Lot Number | er | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | - | Salinity = | | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | <u> </u> | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | | • |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | ······································ | | | | | |
| No. 4 - 11 Tours | | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Manufacturer | Number | Wilg. Seriai# | Oction # | Date | Time |
| | <u> </u> | L | | | | |
| Calibrated to Autoo | al Solution | Manufacture | -r | Lot Numb | er | |
| pH = | | idity = | dity = Temperature = | | | - |
| Conductivity = | Disso | olved Oxygen | | _ Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | ·-···································· |
| | | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | |
| Meter Type | Manufacturer | Number | Wilg. Serial# | Serial # | Date | Time |
| Calibrated to Autoo | al Solution | Manufacture | l er | Lot Numb | er | |
| pH = | | idity = | | Temperature = | | |
| | | olved Oxygen | | | | |
| Turbidity Meter | | | | T | | |
| | | | | | | <u> </u> |
| Comments: | | | | Lancing and the second | and the second of the second o | |

| | T | Model | | Rental Co. | | |
|---|----------------------------------|--|--------------|--|------|------------------|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | * | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | - |
| Conductivity = | Disso | lved Oxygen = | E | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | ···· | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | | _ ' |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | 1 |
| Comments. | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Meter Type | Manufacturer | | Mfg. Serial# | 1 | Date | Time |
| Meter Type Calibrated to Auto | | | | 1 | | Time |
| Calibrated to Autoo | cal Solution | Number Manufacture | | Serial # | | Time |
| Calibrated to Autoo | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoo | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | | |
| Calibrated to Autoo | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoo pH = Conductivity = | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | er | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter | cal Solution | Number Manufacture dity = | r | Serial # Lot Numb Temperature = Salinity = | er | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: | cal Solution Turbi Disso | Manufacture idity = | | Serial # Lot Numb Temperature = Salinity = | er | |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: | Cal Solution Turbi Disso | Manufacture idity = | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type | Manufacturer | Manufacture dity = elved Oxygen = Model Number | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo | Manufacturer cal Solution Turb | Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = Conductivity = | Manufacturer cal Solution Turb | Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date | Time |
| Calibrated to Autoo pH = Conductivity = Turbidity Meter Comments: Meter Type Calibrated to Autoo pH = | Manufacturer cal Solution Turb | Manufacture idity = Model Number Manufacture idity = | Mfg. Serial# | Serial # Lot Numb Temperature = Salinity = Rental Co. Serial # Lot Numb Temperature = | Date | Time |

| | | Madal | | Rental Co. | | |
|---------------------|--------------|-----------------|----------------|------------------------|----------|---------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Serial # | Date | Time |
| meter type | Manaracturer | | | | | |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbid | lity = | | Temperature = | | _ |
| | | ved Oxygen = | | | | |
| | | | | | | |
| Turbidity Meter | | | | | A | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | · | | | | |
| | | | | | | <u></u> |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | | |
| pH = | Turbio | dity = | | Temperature = | | |
| Conductivity = | Dissol | ved Oxygen : | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | <u></u> | | | | | |
| Comments. | | | | | | |
| | | | | | | |
| Motor Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Wanuracturer | Rumber | wing. Oct idin | Jona n | Duto | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r . | Lot Numb | er | |
| pH = | Turbio | ditv = | | Temperature = | | |
| | | | = | • | | - |
| Conductivity = | Dissol | ived Oxygen | | _ Sammy = | | _ |
| Turbidity Meter | | | | | | |
| Comments: | | | I. | | <u> </u> | |
| Comments. | | | | | | |
| | | | | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Wieter Type | Wallulacture | , tunibor | g | | | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | oer | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | | lved Oxygen | | | | |
| | | | | | | _ |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |

| | 1 | Model | | Rental Co. | | |
|---------------------|------------------|---------------|--------------|------------------------|------|-------------|
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Number | er | |
| pH = | Turbi | dity = | • | Temperature = | | |
| Conductivity = | | ved Oxygen | | Salinity = | | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | ** |
| Calibrated to Auto | cal Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen : | | _ Salinity = _ | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| <u> </u> | | | | | | |
| | T | Model | r | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| weter type | - Indirataotator | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | ľ | Lot Numb | er | 1 |
| | TL. | | | | | |
| pH = | | - | , | Temperature = | | |
| Conductivity = | Disso | lved Oxygen | | _ Salinity = | | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | Mf. Carial# | Rental Co. Serial # | Date | _ |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | 1 | | | | |
| Calibrated to Auto | cal Solution | Manufacture | er | Lot Numb | · | |
| pH = | Turb | idity = | | Temperature = | | _ |
| | | | _ | Calinity - | | |
| Conductivity = | Disso | olved Oxygen | | _ Sammy - | | |
| Turbidity Meter | Disso | olved Oxygen | | _ Samity - | | |

2-31 Data Gap Waste Handling Dash Card

• Boeing Project Manager: Will Ernst

• Boeing Field Engineer: Joe Flaherty, Jennifer Parsons, or Fred Wallace

· Boeing Waste Specialist: Dan Machut

Consultant: Golder and EPIContractor: Cascade Drilling

Contractor Responsibilities

- Forecast type and volume of waste to be generated prior to mobilization, communicate needs to Boeing Field Engineer to ensure proper containers are ordered.
- Call Plant 2 Materials Handling to transport containers to project area.
- Fill containers with generated waste. Once containers are full and properly labeled, place containers on pallet and band containers to prepare them for transportation to designated accumulation area.

Consultant Responsibilities

- Apply appropriate soil container identification number and labels. Initiate "Container Log".
- Collect composite sample of individual container when full or sampling effort is complete. Assign appropriate sample ID per QAPP. Complete COC including program identifier.
- Secure lid and oversee contractors place containers on pallet and band containers for transportation to building 2-120 accumulation area, or alternate location assigned by Boeing Field Engineer.
- Contact Plant 2 Materials Handling for pickup and transportation to designated accumulation area.
- Confirm pickup and transportation to designated accumulation area and verify transport within three days.
- Forward copy of completed container log to Waste Tracking Group by email.

Boeing Field Engineer Responsibilities

- Help identify types of containers needed and determine accumulation area.
- Order necessary containers from Drum Yard.
- Supply container labels and drum identification numbers.

Boeing Waste Specialist Responsibilities

 Create waste characterization profile for waste containers based on composite characterization samples.

Contact List

Will Ernst: 206-655-7724 Joe Flaherty: 206-769-5987 Jennifer Parsons: 206-715-7981 Fred Wallace: 206-930-0461

Dan Machut: 206-655-8344

Plant 2 Materials Handling: 206-655-3266

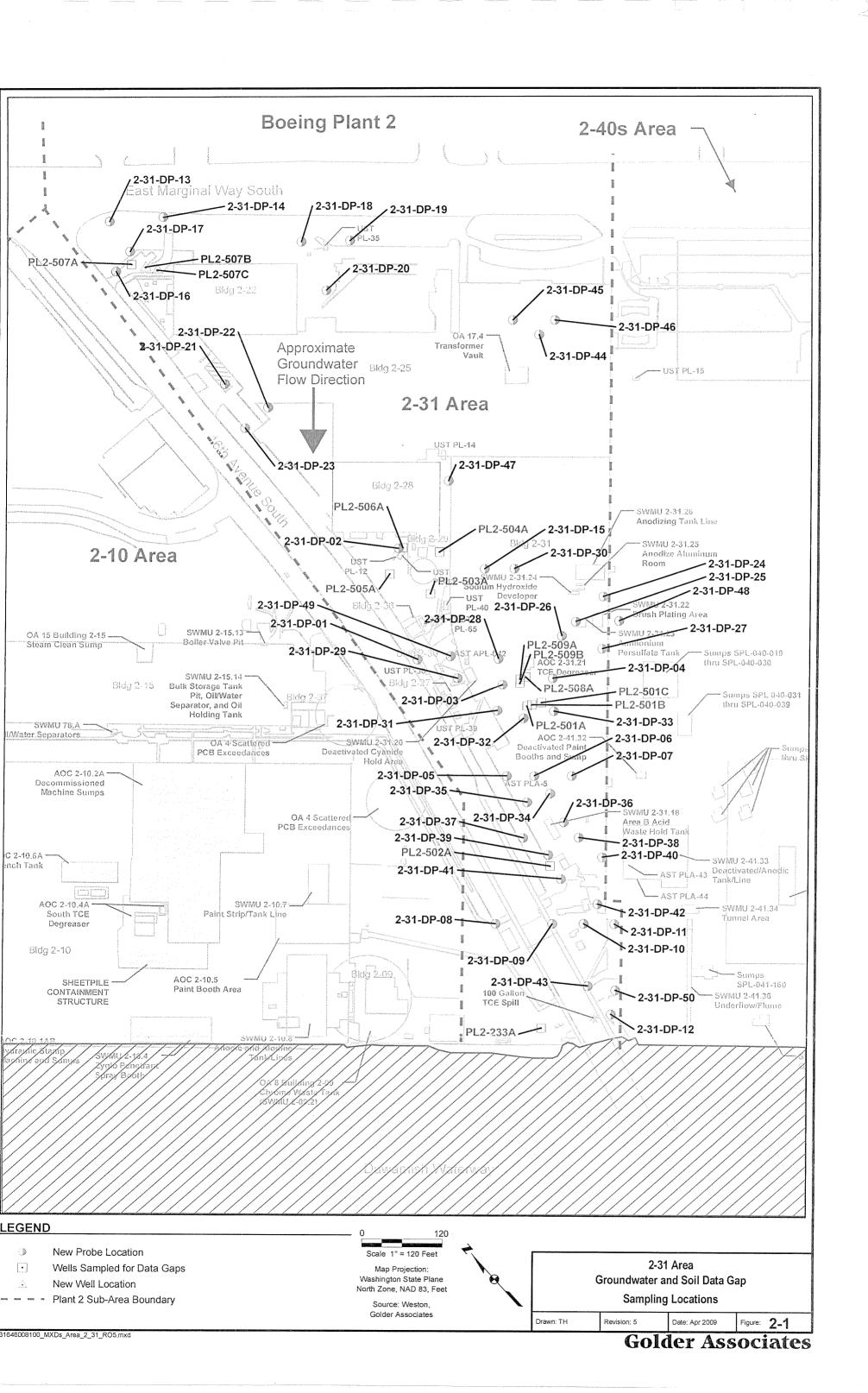


Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | | nt Groups with Cs in Groundwa | | | Other Con | stituent Groups | |
|----------------|-----------------------------|-------------|---|--|-----------------------------|----------------------------|------------|---------------------|--|
| Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total and Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | (| GROUNDWA | TER SAMPLI | NG SUMMARY | |
| New Wells | | | | | | | | | |
| PL2-507B | 35 - 45 | | | dup diss.only | | | | | Constituent list to match PL2-507A. |
| PL2-507C | 75 - 85 | • | • | • | • | | • | • | Constituent list to match PL2-507A. |
| Existing Wells | | | | | | | | | • |
| PL2-233A | 10 - 25 | | | | | | | | PCBs not a GW COC for 2-31 Area. Analyze all 2-31 Area COCs. |
| PL2-501A | 10 - 20 | • | | • | • | | | • | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND near well. Cyanide detected in the A-level near well. |
| PL2-501B | 40 - 50 | • | | MS/MSD diss. Only | • | | | • | PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND in A-level near well. Cyanide detected in the A-level near well. |
| PL2-501C | 68 - 78 | • | | MS/MSD diss. Only | | | | • | PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND in A-level near well. Cyanide will be analyzed at a later time if detected > SL in the B-level. |
| PL2-502A | 8 - 18 | • | • | • | • | • | • | • | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and SVOC analyte lists and PCBs. Cyanide detected near well. TPH never analyzed at or near well. |
| PL2-503A | 7 - 17.5 | • | • | MS/MSD diss. Only | | • | | • | PCBs not a GW COC for 2-31 Area. SVOCs detected near well. Cyanide ND near well TPH detected in samples from well. |
| PL2-504A | 4.2 - 14.7 | • | • | • | | 6 | | • | PCBs not a GW COC for 2-31 Area. SVOCs detected near well. Cyanide ND near well TPH detected in samples from well. |
| PL2-505A | 9 - 24.5 | | • | • dup diss. only | | 9 | | • | PCBs not a GW COC for 2-31 Area. SVOCs detected near well. Cyanide ND near well TPH detected in samples from well. |
| PL2-507A | 8 - 18 | • | • | • dup diss. only | | | • | • | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. SVOCs and TPH ND near well. |
| PL2-508A | 9 - 19 | Not Sampled | | 1. | | | | | Redundant sampling location with PL2-509A. |
| PL2-509A | 8 - 18 | • | 6 10 10 10 10 10 10 10 10 10 10 10 10 10 | • dup diss. only | | • | | • | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and SVOC analyte lists and cyanide. PCBs not a GW COC for 2-31 Area. TPH not analyzed near well. |
| PL2-509B | 40 - 50 | • | | • | • | | | 6 | PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND in A-level near well. Cyanide detected in the A-level near well. |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | | | nt Groups with Cs in Groundwa | | | Other Con | stituent Groups | |
|----------------------|----------------|-----------------------------|------|------------------|----------------------------------|-----------------------------|----------------------------|------------|---------------------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| F | Direct Push Lo | actions | | | | | GROUNDWA | TER SAMPLI | NG SUMMARY | |
| - | | | | | | | | | T | 7 |
| 1 | 2-31-DP-01 | 10 - 14 | • | | • | | • | | | Evaluate the soil to groundwater pathway for TPH. |
| | 2-31-DP-02 | 10 - 14 40 - 44 | 8 | • | • | • | • | | | Evaluate GW quality at former PL2-506A location. SVOCs detected near probe location. TPH detected in sample from PL2-506A. |
| | 2-31-DP-03 | 10 - 14 40 - 44 | • | | • | • | | | | Near PL2-509A to determine the lateral extent of VOC impacts from AOC 2-31.21. Evaluate the soil to groundwater pathway for selected soil COCs from the metals and VOC analyte lists and cyanide. |
| | 2-31-DP-04 | 10 - 14 40 - 44 | • | | • | • | | | | Near PL2-509A to determine the lateral extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| | 2-31-DP-05 | 10 - 14 40 - 44 | 9 | | • | • | | 6 | | Downgradient of PL2-501A to determine extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. Evaluate the soil to groundwater pathway for PCBs. |
| | 2-31-DP-06 | 10 - 14 40 - 44 | 9 | | 6 | • | | | | Downgradient of PL2-501A to determine extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. |
| $/$ $\left[\right.$ | 2-31-DP-07 | 10 - 14 40 - 44 | • | | • | • | | | | Downgradient of PL2-501A to determine extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. |
| /[| 2-31-DP-08 | 10 - 14 40 - 44 | • | | • | | | • | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| | 2-31-DP-09 | 10 - 14 40 - 44 | • | | • | | | | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| | 2-31-DP-10 | 10 - 14 40 - 44 | • | | 0 | | | | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| | 2-31-DP-11 | 10 - 14 40 - 44 | 9 | | • | | | | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| | 2-31-DP-12 | 10 - 14 40 - 44 | • | | 6 | • | | | | Evaluate TCE release downgradient of AOC 2-31.21. Probe data from 1995 and 2002 indicate VOCs in this area. Cyanide detected nearby. |
| | 2-31-DP-13 | 10 - 14 | • | • | • | • | | • | | Evaluate the soil to groundwater pathway for selected soil COCs from the SVOC analyte list and cyanide and PCBs. |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | | | nt Groups with Cs in Groundwa | | | Other Constituent Groups | | |
|----|----------------|-----------------------------|------|------------------|----------------------------------|-----------------------------|----------------------------|--------------------------|---------------------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | | (| GROUNDWAT | ER SAMPLII | NG SUMMARY | |
| | Direct Push Lo | cations | | | | | | | | |
| | 2-31-DP-14 | 10 - 14 | • | • | • | • | | • | | Evaluate the soil to groundwater pathway for selected soil COCs from the SVOC analyte list and cyanide and PCBs. |
| | 2-31-DP-15 | 10 - 14 | • | | • | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| | 2-31-DP-16 | 10 - 14 | • | | ð | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| t/ | 2-31-DP-17 | 10 - 14 | • | • | • | • | | • | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| | 2-31-DP-18 | 10 - 14 | • . | | • | | | 2 | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-19 | 10 - 14 | | | | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-20 | 10 - 14 | G | | • | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-21 | 10 - 14 | • | | • | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| / | 2-31-DP-22 | 10 - 14 | • | | • | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-23 | 10 - 14 | 3 | | • | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| V | 2-31-DP-24 | 10 - 14 | • | | • | • • | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| | 2-31-DP-25 | 10 - 14 | • | | • | • | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| 1 | 2-31-DP-26 | 10 - 14 | 6 | | 6 | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and VOC analyte lists. |



Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | - CA | | nt Groups with Cs in Groundwa | | <u>, , , , , , , , , , , , , , , , , , , </u> | Other Con | stituent Groups | |
|------------|-----------------|--|------|------------------|----------------------------------|-----------------------------|---|--|--|---|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | (9 / 1 | 1 | | | (| GROUNDWA ⁻ | TER SAMPLII | IG SUMMARY | |
| | Direct Push Loc | ations | | | | | | | | |
| | 2-31-DP-27 | 10 - 14 | 6 | | • | • | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| | 2-31-DP-28 | 10 - 14 | • | | • | • | | 0 | the property of the state of th | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and VOC analyte lists and cyanide and PCBs. |
| | 2-31-DP-29 | 10 - 14 | • | | • | • | • | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide and TPH. |
| | 2-31-DP-30 | 10 - 14 | • | | • | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| ~ | 2-31-DP-31 | 10 - 14 | 9 | | 9 | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list and PCBs. |
| | 2-31-DP-32 | 10 - 14 | 8 | | • | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| | 2-31-DP-33 | 10 - 14 | • | | | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| i | 2-31-DP-34 | 10 - 14 | • | | 9 | | | The state of the s | The control of the co | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| / | 2-31-DP-35 | 10 - 14 | • | | • | | | and the second s | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-36 | 10 - 14 | • | | 9 | | | ⊕ | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. |
| | 2-31-DP-37 | 10 - 14 | • | | 9 | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. |
| <u>;</u> / | 2-31-DP-38 | 10 - 14 | • | 9 | 9 | | | ● ************************************ | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. |
| | 2-31-DP-39 | 10 - 14 40 - 44 C-level (top of silt) | 0 | 6 | • | • | • | ● | Freezelsking Company and Affilia - Company a | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. Evaluate the potential for chlorinated VOCs at depth. Match analyses for PL2-502A. |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | Constituent Groups with 2-31 Area COCs in Groundwater | | | | | Other Cor | stituent Groups | |
|---|----------------------|-----------------------------|---|------------------|---|-----------------------------|----------------------------|-----------------|---------------------|---|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | |
| ŀ | Location | [mtotvar (it bgo/] | , | | I | | | L TER SAMPLI | I NG SUMMARY | Rationale for Selection of Laboratory Analyses |
| | Direct Push Loc | cations | | | *************************************** | | | | | |
| | 2-31-DP-40 | 10 - 14 | • | • | • | | | | | Constituent list to match groundwater list. Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-41 | 10 - 14 | • | • | e | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and SVOC analyte lists. |
| | 2-31-DP-42 | 10 - 14 | • | - | | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| | 2-31-DP-43 | 10 - 14 | • | | • | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| | 2-31-DP-44 | 10 - 14 | • | | 9 | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| | 2-31-DP-45 | 10 - 14 | 9 | | • | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| / | 2-31-DP-46 | 10 - 14 | • | | • | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| | 2-31-DP-47 | 10 - 14 | • | , | • | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| | 2-31-DP-48 | 10 - 14 | • | | • | • | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| V | 2-31-DP-49 | 10 - 14 | © | | • | • | 9 | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide and TPH. |
| | 2-31-DP-50 Notes: | 10 - 14 | • | | * | | | • | | Evaluate the soil to groundwater pathway for PCBs. |

NA

Not applicable Polychlorinated biphenyls Semivolatile organic compounds **PCBs** SVOCs

TPH Total petroleum hydrocarbon VOCs Volatile organic compounds

Note on sample intervals

For existing wells, sample interval is the installed screen interval. For new wells, sample interval is the planned approximate screened interval. For soil samples, sample interval is the planned sampling depth.

| Station Sample: ID Field Conditi | ons | 2-31-0 | Boeing Plant 2, Seattle/Tukwila, Washington DP-33 Date 2-31-DP-33-12-W-0, I (Deplicate) Field Team: (Initials) TB | | | | | | | | | | | |
|--|------------|-------------|--|----------|-------------------------|------------------------|----------------------------|---------------|----------------|--|--|--|--|--|
| | | | | Purac | Inform | otion | | | | | | | | |
| Well Diameter (i | n.) | 1" | | | | | | | | | | | | |
| Well Depth (ft.) | | 141 | Purge Method (circle): Submersible pump Bladder Pump | | | | | | | | | | | |
| Initial Depth to V | | | | | | | | | | | | | | |
| Depth of Water (| | | | | | | Peristaltic Pu Other: : | | | | | | | |
| 3 Casing Volume | | | | | | Start Time | 1555 | | - | | | | | |
| 1 Casing Volume | 9 | | | | | | | | | | | | | |
| | | | | | Total G | allons Purged | 1730 4.0 gsllo | -3 | | | | | | |
| | | DTW (we | ells | | | | , , , , , | | | | | | | |
| Time | Gallons | s only) | рН | Cond. | NTU | DO | Tomp | 000 | | | | | | |
| 1627 | 1.5 | | 7.92 | 0.995.5 | | | Temp. | ORP | Appearanc | | | | | |
| 1630 | 1.7 | | 7.89 | 0.713.5 | | 0.46mg/L | 19.57 | 17.7 | yellowish | | | | | |
| 1633 | 1.9 | | 7.87 | | | 6.50-11 | 19.65 | - <i>P</i> -/ | yellowsh | | | | | |
| 1636 | 2.1 | | | 6.991-51 | 59.7 | 0.5/-1/2 | 1969 | - 26.9 | yellarist | | | | | |
| 1639 | 2.3 | | 7.86 | 0.991.5 | 33.0 | 0.5/1 | 1942 | -21.4 | Slighty yellow | | | | | |
| 1642 | Z.5 | | | 0.990 9 | | 0.5/4/2 | 19.53 | -26.9 | Stighty yellow | | | | | |
| 1645 | 2.7 | 1 | 7.84 | 0.988-5 | | 0.49-1/2 | 19.59 | -21.8 | clear | | | | | |
| 1648 | 2.9 | | 7.83 | | 38.5 | 0.48-12 | 19.52 | -21.8 | cleu | | | | | |
| 1651 | 3,1 | | 7.82 | 0.985 | | 0 47 mg/c | 19.56 | - 22.8 | clear | | | | | |
| 1658 | | | 7.81 | | 34.4 | 6.47/ | 19.55 | -22.1 | clear | | | | | |
| 1701 | 3.5 | | 7.81 | 0.983_SL | 28,9 | 0.47-1/2 | 19.56 | -23.1 | Clar | | | | | |
| | 3.7 | | 7.81 | 6.982-52 | 30.3 | 0.50-12 | 19.54 | ~24,0 | Clea | | | | | |
| 1764 | 3,9 | | 7.81 | 0.981~5/ | 28.3 | 0.457/1 | 19.51 | -z4.3 | Olear | | | | | |
| | | | | | | | | - | 6 lear | | | | | |
| | | | | | | | | | | | | | | |
| | | | 4000000 | Sample | Inform | ation | | | | | | | | |
| ample Metho | od(s) (cir | cle): Peris | taltic pump | / Submer | sible pum | p / Bladder | r Pump / Otl | hor | | | | | | |
| Analysi | | Time | | | | | | 1101 | | | | | | |
| VOCs | | 1710 | Bottle | rype | | tive/Filtratic | on | Comments | | | | | | |
| Dissolved N | | | 3-40m | | Hel | | Diplicate | @ 1740 | | | | | | |
| Total Met | | 1710 | 2-1L, H | DPE/500L | FIELD FILTERS | D/ HNO2 | Duplicate | @1740 + M | b | | | | | |
| Chromium | | | | | | | | | Creation . | | | | | |
| Total and WA | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| TPH-Dx, TP | | | | | | | | | | | | | | |
| SVOC | | | | | | | | | | | | | | |
| PCBs | | | | | | | | | | | | | | |
| Redox | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| End Time | Γ | 1730 | 7 | | | | | | | | | | | |
| | | | ES/NO | | s / Excep Presence o | tions: of sinking p | roduct? | YES / NO | | | | | | |
| esence of floa | | | | | *********** | | | | | | | | | |
| esence of floa | | | | | | | E | | | | | | | |
| esence of floa | | | | | | | | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date 8/3/09 Station DP-33 Field Team: (Initials) 2-31-09-33-10-W-O, 1 (Doplicate) Sample: ID Field Conditions INSIDE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) 141 Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1555 3 Casing Volumes 1 Casing Volume End Time | 1730 Total Gallons Purged 4.0 95/10 DTW (wells only) Cond. NTU DO Temp. ORP Appearance Time Gallons Hq 19.57 1.5 0.995-5/ 83.7 0.46mg/L -17.7 1627 7.92 wellowish 1.7 7.89 09935/ 73.0 19.65 6.50-14 -17/ 1630 4elbush 0.5/4/2 7.87 1633 19 6.991-52 59.7 1969 -20.9 0.991 53.0 0.5/1 -21.4 196Z 1636 2.1 7.86 7.85 0.990 4 47.1 0.5/1/2 19.53 -20.9 z.3 1639 0.988-54 42.0 7.84 0.49-12 -21.8 1642 2.5 19.59 0.987-5- 38.5 -21,8 1645 0.48-12 2.7 7.83 19.52 7.82 2.9 0.9854 37.8 O ATURE 19.56 - 22.8 1648 clear 0,984.54 34.4 -22.1 1651 3.1 7.81 6.475// 19.55 ckar 7.81 0.993 5 28.9 0.47-1L -23.1 1658 3.5 19.56 clar 0.982-52 30.3 ~24,0 1701 7.81 0.50m/L 3.7 12.54 Cleu 0.981-54 28.3 3.9 7.81 0.45-12 19.51 -z4.3 olear 1704 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments **V**OCs 1710 3-40mL VOAs HCI Diplicate @ 1740 Dissolved Metals 2-11 HOPE/soul Duplicate @1740 + Mercung 1710 FIELD FILTERED/ 14NO2 **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** Redox

Comments / Exceptions:

Presence of floating product? YES / Presence of sinking produc

2-31 Area Data Gap Groundwater Sampling Field Data

| | r | | Boein | g Plant 2, | Plant 2, Seattle/Tukwila, Washington Date 8/3//05 | | | | | |
|----------------------|---|--|-----------|--------------|--|----------------|-----------------|---------------|----------------|--|
| Station | | DP-04 | | | | H Eigld Ton | m: (Initials) | 8/3//09 JB | | |
| Sample: ID | 20 | Z-31-DP-04- | | <u> </u> | | Fleiu lea | III. (IIIIIais) | <u> </u> | | |
| Field Conditio | ns | INGIO | <u> </u> | | | | | | | |
| | | | | Purge I | nforma | tion | | | Ţ. | |
| Well Diameter (in | .) | יע | | Pur | ge Metho | od (circle): | Submersible p | ump | | |
| Well Depth (ft.) | | 14' | | | | | Bladder Pump | _ | | |
| Initial Depth to W | ater (ft.) | | | | | | Peristaltic Pun | | | |
| Depth of Water C | olumn | | | | | | Other: : | | - - | |
| 3 Casing Volume | | | | | | Start Time | 1720 | | | |
| 1 Casing Volume | | | | • | Takal O | End Time | | <u> </u> | - | |
| | | | | | Total G | allons Purged | Bre galle | <u> </u> | | |
| | | DTW (wells | | | | | | | | |
| Time | Gallons | only) | рΗ | Cond. | NTU | DO | Temp. | ORP | Appearance | |
| 1747 | 3.0 | , | 7.97 | 1.154 Sh | 61.9 | O. ZBrok | 19.65 | -32.6 | yellowish | |
| 1750 | 3.2 | 14.11 | 7.96 | 1.152-82 | | 0.247/2 | 19.65 | -37.9 | sells in | |
| 1753 | 3,4 | NAMES OF THE PARTY | 7.95 | 1.152-2 | | 6. 25 mgk | 19.53 | -33.Z | Velain | |
| | 3.6 | A SA | 793 | 1.151.8 | 43.3 | 0.25-1/2 | | - 33.4 | 2014 30 | |
| 1756 | 3.8 | and the second | | 1.150mSL | | 0.26ml | | - 32.7 | V-110-03 | |
| 1759 | | 4.4.24. av | 7.92 | 1.150d | 35.9 | 6.25-1/2 | 1 | -32.9 | hath is | |
| 1802 | 4.0 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 7.9/ | 1150mg/ | 32.7 | 0.25ml | 19.57 | - 33./ | Clarin | |
| 1805 | 4.7. | All and a | 7.89 | | | | 19.57 | -32 C | cker | |
| 1808 | 4.9 | | 7.88 | 1.150 | 1 | 0.25_/1 | | | | |
| 181/ | 4.6 | | 7,87 | 1,199-2 | 29.2 | 6.25 SK | | -31.2 | (Law) | |
| 1814 | 4.8 | | 7.86 | 1.142-8- | 27.9 | Oczans | 19.51 | ~31.9 | Cleany | |
| | The second | | | . 156 | | | | | | |
| | | à. | | | | | | | | |
| | | (4) E.L. | | | ļ | | | | | |
| Epinesia Epinesia | .3%. | 40.00 | | | | | | | | |
| | | , | | Sample | e Inforr | nation | | | | |
| Sample Meth | nod(s) (c | ircle): P erista | altic pum | Subme | rsible pur | mp / Bladde | er Pump / C | Other | | |
| | | | | | | vative/Filtrat | | Comments | • | |
| Analy | | Time | | е Туре | T | /auve/Fillial | ION | Comments |) | |
| VOC | | 1820 | | LVOAs | HCI | | | | | |
| Dissolved | | 1820 | 1-14199 | E/1-sour Hor | e HNO3/A | ILTERED FIELD | <u> </u> | +/4 | ercon | |
| Total N | | | ļ | | | | | | | |
| Chromi | um VI | | <u> </u> | | | | | | | |
| Total and | WAD CN | 1820 | 1.500m | 1 HOPE | NA | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | ļ | | | |
| SVC |)Cs | | | | | | | | | |
| PCI | Bs | | | | | | | | | |
| Redox | | | | | | | | | | |
| | | | | | | | | | | |
| F. J.Tim. | | 1020 | 7 | | | | | | | |
| End Time | ਤ ==================================== | 1830 | <u> </u> | | | | | | | |
| _ | | | rousto | Comme | ents / Exc | ceptions: | n product? | YES / NO | 2) | |
| Presence of | floating p | roduct? Y | ES/NC | <u>/</u> | resen | ce of sinking | y product? | ILO/ W | <u>/</u> | |
| 1 | | | | | ····· | | | | | |
| | | | | | | | | | | |
| | | ****** | | | <u> </u> | | | | | |
| | · | ······ | | | | | | | | |

| Station Sample: ID | | DP-3/ 2-31-0P-31 | -10-W. | -0 | | Field Tea | Date m: (Initials) | 8/31/09 | |
|-----------------------|---------------|---------------------|-----------|--------------|-----------|---------------------------|--|----------|-----------|
| Field Condit | ions | INSIDE | | | | | | | |
| | | | | Purge Ir | nformat | tion | | | |
| Well Diameter (| in) | 19 | | | | | Submersible pu | ımp | |
| Well Depth (ft.) | , | 191 | | | • | • | Bladder Pump | | |
| Initial Depth to | Water (ft.) | : | | | | - | Peristaltic Pum | Ď | |
| Depth of Water | | | | | • | r | Other: : | | |
| 3 Casing Volum | | | | | | Start Time | 1938 | | ┥ . |
| 1 Casing Volun | ne | | | | Total Ga | End Time allons Purged | 2040 | • | - |
| | | | | | Total Ga | allons ruigeu | 40 galler | <i>-</i> | |
| | | DTW (wells | | | | | | | _ |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearanc |
| 8904 | 2.3 | | 2.75 | 0.860-8 | 20.1 | 0.194 | 11-43 | -12.4 | clear |
| 807 | 2.5 | | 7.74 | 0.8575/2 | 16.6 | 6.19g/L | 19.38 | ~/3.O | cle |
| 100 BR10 | 7.7 | | 7.73 | 0.865.5/ | 13.8 | Ol Tyk | 12.37 | 1/3.7 | Clean |
| 3813 | 7.9 | | 7.72 | 6.853.2 | 12.0 | 6.16 K | 19.35 | -14.1 | Cleur |
| D018 | 3,1 | , . | 27/ | 0,850ste | 11.6 | 0.16/2 | 19.34 | -14,4 | el |
| OB19 | 3.3 | | 7.70 | 0.848.SI | 10.83 | 0.16.1 | 19.33 | -14.5 | clev |
| 822 | | | 7.69 | 6.847-56 | | 015-14 | 19.30 | -14.5 | clear |
| 280 ZS | 3.7 | | 7.68 | 6.897. 2 | 9.96 | 6,15-12 | 19.28 | -14.5 | clear |
| | | | | | | | <i>a</i> | | |
| Ÿs . | | | | | - | , | | | |
| | | | | | | 10 | | | |
| | | | | | | | | | |
| | | Ť | | | | | | | |
| | | | | | | | | | |
| | | | | Sample | | | or Dump / C | thor | |
| Sample Me | ethod(s) (c | ircle)(Perista | altic pum | p Submer | | | | | |
| Ana | alysis | Time | Bottl | е Туре | Preserv | /ative/Filtrat | ion | Comment | S |
| V | OCs | 7070 | 3-40m | L VODs | HCI | | | | |
| Dissolve | ed Metals | 2020 | 1-500-2 | HOPE/IL HOPE | H/O3/ | FIELD FILTE | | + Me | revry |
| | Metals | | | | | 5 × | | | U |
| Chror | nium VI | | | | | | <u> </u> | | 7 |
| Total and | WAD CN | | | | | | | | |
| TPH-Dx | , TPH-Gx | | | | | | | | |
| SV | 'OCs | | | | | | | | |
| Р | CBs | 2020 | 2-14 | AG . | NA | | | | |
| Re | dox | | | | | | | | <u> </u> |
| | | | .1 | | | | | | - |
| End Ti | me | Z 04 0 |] | | 21 · 1 | | | | |
| | | | | | nts / Exc | eptions: | | | <u> </u> |
| Presence | of floating p | oroduct? Y | ES ME | | Presend | ce of sinking | g product? | YES (N | 0) |
| | | | | <i>a</i> | | | | 4000EN | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date [Station 8/31/08 Field Team: (Initials) Sample: ID 31-00-04-40-4-0 TB Field Conditions I'VE LOVE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 441 Peristaltic Pump Initial Depth to Water (ft.) Depth of Water Column Other:: Start Time 2100 3 Casing Volumes End Time 2300 1 Casing Volume Total Gallons Purged 5.5 gallons DTW (wells only) Cond. NTU ORP Gallons DO Temp. Appearance Time рН 2122 2080 8.47 0.702 Sh 0.12-0/6 19.30 -743 1.6 2131 2.2 19.30 -745 8.41 0 700-Sh 011-1/2 2139 7,6 8.35 6.70/-SL 1144 O. Jank 19.18 -76.8 2148 -71.8 3.0 8.32 911 19.07 2155 676/wh -77.3 8.31 3.3 764 1907 8.26 270 \$ 6.70 ms/ 76.8 3.5 305 19.02 8,23 -76,2 2210 3.8 273 18.96 -77.2 2217 282 18.93 4.1 2220 6.692 SL 4.3 250 18.92 -76.7 820 2223 0.698 8.21 268 18.86 -77.2 4.5 2226 4.7 6,698-2 205 6.08x 18.84 -74.8 8.19 2229 0.697 -5/2 1.9 8.21 191 0.09-16 18.86 -77.4 2232 8.70 0.703.8. 5.1 198 18.86 -77.6 -77.2 2235 8,21 188 5.3 0.698_ Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Time Bottle Type Preservative/Filtration Comments Analysis 2245 3-40ml VOA **VOCs** HCI Dissolved Metals HNOS FIELD FILTERED 2245 1 500-1 HOPE/IL HOPE + Mercun Total Metals Chromium VI Total and WAD CN NA 2246 1500LHOPE TPH-Dx, TPH-Gx **SVOCs PCBs** Redox 2300 **End Time Comments / Exceptions:** YES /NO YES / (NO) Presence of floating product? Presence of sinking product? Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments

| | 2 | -31 Area | Data (| Gap Gro | oundw | ater Sar ukwila, Was | mpling F | ield Data | a | | | |
|---|---|-----------------|---|---------------|------------------------|--|-----------------------------|-----------|-------|--|--|--|
| Station | | 09-03 | DOGII | ig Plant 2, | Seattle/ I | T | Date | 9/1/09 | | | | |
| Sample: ID | | 2-31-DP-0 | 318-11 | | | Field Tea | am: (Initials) | JR | | | | |
| Field Condition | ns | Inside | 2-7- 0 | | | 1 | 4 | 1~B | F | | | |
| | | L 3= / 12 10152 | | | | 4. | | | | | | |
| | | - | 7 | Purge I | | | | | | | | |
| Well Diameter (in | ı.) | 1" | 4 | Pur | ge Metho | d (circle): | Submersible p | ump | | | | |
| Well Depth (ft.) | | 141 | 4 | | | | Bladder Pump | • | | | | |
| Initial Depth to W | | | 4 | | | • | Peristaltic Pun Other: : | 125 | | | | |
| Depth of Water C | | | - | | | Start Time | | | | | | |
| 3 Casing Volume1 Casing Volume | | | 4 | | | End Time | | | | | | |
| r Casing volume | | L | Total Gallons Purged 200 gallon | | | | | | | | | |
| | | DTW (wells | ; | | | J | - | | · | | | |
| Time Gallons only) pH Cond. NTU DO Temp. ORP App | | | | | | | | | | | | |
| 1548 | | | | | | | | | | | | |
| 1551 | 1.3 | | 5.46 | 6.635.2. | 51.9 | 0.51-12 | 17.72% | -6.4 | clary | | | |
| 1554 | 1.4 | | 553 | 0.634-18 | 38./ | 0,5 Toy/4 | 12718 | -6.1 | Clean | | | |
| 1557 | 1.5 | | 5.60 | 0.634SC | 31.C | Ostagle | 19.71 % | -6.2 | U- | | | |
| 1600 | 1.6 | | 5.65 | 0.634~86 | Z8,] | 0.61.12 | 12.70 % | -6.5 | ch. | | | |
| 1663 | 1.7 | | 6.68 | 0.6332 | 26,5 | 0.05-16 | 19,689 | -69 | Cher | | | |
| 1606 | 1.8 | | 5.7 | 0.633.8 | 27.0 | 965m/L | 19.68°C | -6.5 | cles | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| į. | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | <u> </u> | | | | | | | | | | |
| Sample Meth | nod(s) (c | ircle): (Perist | altic pum | | e Inform rsible pun | | er Pump / O | ther | | | | |
| Analy | sis | Time | Bottl | е Туре | Preserv | ative/Filtrat | ion | Comments | 3 | | | |
| Voc | | 1615 | 3-40, | | HCI | | | *. | | | | |
| Dissolved | Metals | 1615 | | 11-500-L HORE | | FULL O FILTICIDES | | + Mercu | ora. | | | |
| Total M | | 1, , , , | 1 200 | | 1 | | | | 0 | | | |
| Chromit | | | | | | 0 | | | | | | |
| Total and \ | | 1615 | 1.500 | L HOPE | NA | | | | | | | |
| TPH-Dx, | | 1 | 1, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | - FEFE Se | /// | | | | | | | |
| SVO | | | | | | | | | | | | |
| PCE | | | | | | ······································ | | | | | | |
| Redo | | | | | | | | | | | | |
| T.C.G. | <u> </u> | | | | | ii | | | | | | |
| | | 1/5 | <u> </u> | | | | 1 | | | | | |
| End Time | | 1630 | | | | | , . | | | | | |
| Presence of | | | /ES /(NO | Comme | nts / Exc Presenc | eptions: e of sinking | product? | YES / 🕅 | | | | |
| | 7 |) | | | | | | ****** | | | | |
| | | | | | | | | ******* | | | | |
| , | *************************************** | | | | | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Station Date 9/1/09 OP-ZB Field Team: (Initials) Sample: ID 2-31 - DP-29-10-1-6 JB Field Conditions TNSIDE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) (41 Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1615 3 Casing Volumes End Time 1745 1 Casing Volume 5.07 dh-3 Total Gallons Purged DTW (wells only) Cond. NTU DO Temp. ORP Appearance Gallons Ηq Time 643 0.700 SL 81.1 0.22-7/ 21.2200 2,4 6.27 188 2.6 6.42 0.698-5L 655 0.23-1/2 21. 72 % 14.8 1646 28 6.46 1649 0.698-SL 58.0 0.25m/L 21.240c 15.5 3.0 48 0.6978 547 6.28-16 21. 22% 15.1 1652 1655 14.7 21. 23°C 3.2 6.47 6 696 X 42.9 6.3/2/6 6.47 21.23% 19.5 1658 3,4 6.696-5 41.0 0.33-12 14,4 3.6 36.1 21.22% 1701 0.676-56 3.8 6.48 34.1 21.2/ % 14,2 1704 0.695252 0.39-16 6.48 0.696-52 14.0 21,24°C 40 31 R 6.40m/L 1707 0.695.51 4.2 6.48 28.9 0.37-1/2 21.23 € 14.0 1710 4,4 6.48 27.4 1713 6.695 SL 21.22℃ 140 clear 6.48 0.695-52 21.2100 14.0 25.9 0.34 1716 4.6 21.21°C 1719 4.8 6.48 b.695.SL **2**5.1 0.33.sk 14. 0 Sample Information Sample Method(s) (circle): (Peristaltic pump / Submersible pump / Bladder Pump / Other **Analysis** Time Bottle Type Preservative/Filtration Comments **VOCs** 1730 3-10-L VODS 401 **Dissolved Metals** 1730 1-500-L HOPK/HLHDPK HAMS/FIELD FILTERED + Mercum **Total Metals** Chromium VI Total and WAD CN 1730 1-500-L HOPE NA TPH-Dx, TPH-Gx **SVOCs PCBs** 1730 2-16 AG N4 Redox 1745 **End Time** Comments / Exceptions: YES/(NO) YES (NO) Presence of sinking product? Presence of floating product?

| | Z- | UI MICA | | | | ukwila, Was | shington | leid Data | |
|--------------------|--------------|---|-----------|--------------|------------|---------------|-----------------|---|-------------|
| Station | | DP-03 | | | | | Date | | |
| Sample: ID | | 2-31-02-0 | | -0 | | Field Tea | ım: (Initials) | I'B | |
| Field Condition | ons | IN | SIDE | | | V.a. | | | |
| | | | | Purge I | nforma | tion | | | |
| Well Diameter (ir | ղ.) | 14 | 1 | | | | Submersible pu | ımp | |
| Well Depth (ft.) | <i>'</i> | 441 | 1 | | | | Bladder Pump | | |
| Initial Depth to W | /ater (ft.) | | 1 | | | į | Peristaltic Pum | 回 | |
| Depth of Water 0 | Column | |] | | | | Other:: | | |
| 3 Casing Volume | es | | | | | Start Time | 1815 | | - |
| 1 Casing Volume | 9 | | | | | End Time | | | 4 |
| | | | | | Total Ga | allons Purged | 3.2 geth | 2 | _ |
| | | DTW (wells | 3 | | | | | | |
| Time | Gallons | only) | pН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1840 | 1.8 | | 7.40 | 0.480_8- | 185 | 0.137/2 | 19.42 | -5%.9 | cloud |
| 843 | 5.0 | | 7,33 | G. 479_SL | Z06 | 6.13 00/2 | 19.36 | -54.7 | chi |
| 1846 | 7.2 | | 7.74 | 6,479.SL | 209 | 613.16 | 19,29 | - 55: 7 | claus |
| 1849 | 2.4 | | 7.21 | 6.478-SL | 222 | 0.13m/L | 19.28 | -56.7 | Clarch 0 |
| 1852 | 2.6 | | 7.16 | OA TO-SL | 234 | 0.13~16 | 12.24 | -574 | CH |
| 1855 | 2.8 | | 7,15 | 0.477 | 218 | 0.1300/4 | 19.23 | -58.0 | Oh St |
| | | | | | | | 14 | | 0 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | <u> </u> | | | | | |
| | | | | | | | | | |
| | | | <u> </u> | | <u> </u> | | | | |
| | | <u> </u> | | <u> </u> | <u> </u> | | | - | |
| | _ | | | | | | | | .: |
| L | | | <u></u> | Cananal | lufore | | | 1 | |
| | | | | • | e Inform | | D / O | th or | |
| Sample Met | hod(s) (ci | rcle): (Perist | altic pum | >/ Subme | rsible pun | np / Bladde | er Pump / O | tner | |
| Analy | ysis | Time | Bottle | е Туре | Preserv | ative/Filtrat | ion | Comments | - |
| VO | | 1900 | 3-40. | L VOA | HCI | | | | |
| Dissolved | d Metals | 1900 | | | 4N02/F1 | ELD FILTEDAD | * | Mer.ug | |
| Total N | 1etals | • | | , | 7 | | | | |
| Chromi | | | | | | | | | |
| Total and | | 1700 | 1-500-1 | HOIE | N4 | - | | *************************************** | 4 . |
| TPH-Dx, | - " | 1. | | | 1 | : | | | |
| SVC | | | | | | | | | |
| PC | | | | | | | | | |
| Red | | | | | | | | | |
| Red | UX | | | | | | 1 | | |
| End Time | | 1915 | | | 1 | | | | |
| | | | - | Comme | nts / Exc | eptions: | | ~ | |
| Presence of | floating pr | oduct? | /ES /100 | | Presenc | e of sinking | product? | YES / (1) |) |
| | | *************************************** | | | | | | | |
| | | | | | , | | | | |
| | | | | | | | | | |
| , | | | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date 9/1/09 Station DP-06 Field Team: (Initials) Sample: ID 2-31-DP-06-10-W-0 JB Field Conditions INS COK **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 141 Peristaltic Pump Initial Depth to Water (ft.) Depth of Water Column Other:: 3 Casing Volumes Start Time 2005 End Time 2135 1 Casing Volume Total Gallons Purged 1,5gall-5 DTW (wells only) Cond. NTU DO Temp. **ORP** Appearance Gallons рН Time 2029 16 7.11 8.455.5L 112 20.92°C 13.6 Cleari 0,53 m/L 13.2. 7./0 20.93°C 2032 6.45S.SL 79.5 0.54-14 .7 321 Zo.89°C 2035 8 7,09 0.45 Sad 13.7 G.9582.8 20.8800 29.6 13.7 7.08 2038 .9 1.0 26,87% 7.07 28,1 2041 177 clean 6. (20.890 7.07 0.454-51 27.1 131 204 a Zo.86°C 6.454-8 8.86 13.6 1.2 7.00 2047 La Final Turbish before flow through cell Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments **VOCs** 2100 3-40-L VOA. 1401 2100 **Dissolved Metals** + Mercy 1-11 40PE/1-520-140PE APOS /FIRED FILTERED **Total Metals** Chromium VI Total and WAD CN 2100 1-500_L HOPB NA TPH-Dx, TPH-Gx **SVOCs PCBs** Redox 2135 **End Time** Comments / Exceptions: Presence of floating product? YES / (NO) YES /NO Presence of sinking product? very slow producer for we tour

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date 911/09 Station DP-36 Field Team: (Initials) Sample: ID 2-81-09-36-10-4-0 Field Conditions INSIDE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) 141 Bladder Pump Well Depth (ft.) (Peristaltic Pump) Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 2105 3 Casing Volumes End Time 1 Casing Volume 2240 Total Gallons Purged 5.5 5 Mms DTW (wells only) Gallons Cond. NTU DO Temp. ORP Appearance Time рН 7,29 2137 20.14 -23.3 3.0 0,781,8/2 709 Clow 2140 20,13 3, Z 7.30 0.784-5/ -315 6 78tush 7.22 19.99 -39.2 3,4 111 2146 3.6 7.25 6.780.52 19.95 -35,3 2152 86.2 2156 8.8 6,774WS 79.81 -31.0 7.23 76.6 2204 7.24 6,792.54 19.66 4.3 - 36.9 35.6 19,64 -39.1 7,23 30,2 2207 45 6.786 S/2 4.7 2210 7.22 6.781.54 24.4 12,61 -90 Z 7, 22 6.789_SI 19.58 - 39,9 20.8 49 22/3 7216 6.1 7.23 6.788 54 19.58 -23.1 20.5 17.56 -94.5 2219 5.3 7.24 G788 5/ cher Sample Information Sample Method(s) (circle): (Peristaltic pump \Submersible pump / Bladder Pump / Other Comments **Analysis** Time Bottle Type Preservative/Filtration **VOCs** 3-40-6 10As 40 2230 Dissolved Metals 1-16409E/1-500-LUMPE HNOZ/FIELD FLIREDED 2230 **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** Z-IL AC NA 2236 Redox **End Time** 2240 Comments / Exceptions: YES / NO YES / NO Presence of sinking product? Presence of floating product?

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date 9/1/09 Station DP-06 Field Team: (Initials) Sample: ID 2-31-DP-06-40-W-6 JB Field Conditions INSIDE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 44' Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 2240 3 Casing Volumes 24/0 1 Casing Volume End Time Total Gallons Purged 3,594llus DTW (wells only) ORP Cond. NTU DO Temp. Appearance Time Gallons рΗ 862 1.2 7.48 0.687_5/_ 0.31-1/ 19.20 °C -524 2300 2308 7.48 0.685.5/_ 1089 0.11-1/2 19.08 % -58.0 1.6 -62.0 7.48 0.683.2 1105 0.12/1 1903°C 2.0 2321 18.97 7.49 -62.6 2324 2. Z. 930 0.127/2 6.68 2 18.94 7.49 897 · 62.9 2327 7.4 2.6 7.48 0,686,86 755 0.13-14 18.95 -43.3 2330 18.84 2337 7.42 3.68Ander 649 -63.1 2.9 2340 6.68 we 637 18.83 -63.4 3.1 7.39 7.35 0.685.8c 3.3 642 18.80 -63.4 2343 Sample Information Sample Method(s) (circle) Peristaltic pump/ Submersible pump / Bladder Pump / Other Bottle Type Preservative/Filtration Comments Analysis Time VOCs 2135 3-40-L VOAS Hal + Meneny **Dissolved Metals** HMO, FIELD FILTERED 7460 1-12 HOPE/1-504-L HOPE Total Metals Chromium VI Total and WAD CN 24AA 1-500-L 40PE NA TPH-Dx, TPH-Gx **SVOCs PCBs** Redox 2410 **End Time** Comments / Exceptions: YES (NO) YES (NO) Presence of sinking product? Presence of floating product?

| | Boeing Plant 2, Seattle/Tukwila, Washington | | | | | | | | | | | | |
|----------------------------------|---|---|-----------|---------------------------------------|------------|--|---------------------------------|----------|---------------------------------------|--|--|--|--|
| Station | | D-05 | DOGIII | g r lant z, | Ocathor 1 |] | Date | 9/2/09 | | | | | |
| Sample: ID | 6. | 2-31-09-03 | 5-10-11-0 | • • • • • • • • • • • • • • • • • • • | **** | Field Tea | m: (Initials) | | | | | | |
| Field Condition | ons | Sunny & C | | | | | | | | | | | |
| | | | | <u></u> | | 1: | | | | | | | |
| | | | ٦ | | nformat | | 0.1 (1.1 | | | | | | |
| Well Diameter (in | n.) | <u> " </u> | 4 | Pur | ge ivietno | | Submersible p | ump | | | | | |
| Well Depth (ft.) | M-1 1813 | 14' | - | | | | Bladder Pump Peristaltic Pum | | | | | | |
| Initial Depth to V | | | - | | | | Other:: | | | | | | |
| Depth of Water 0 3 Casing Volume | | | | | | Start Time | 1505 | | 1 | | | | |
| 1 Casing Volume | | | 1 | | | End Time | 1615 | | · | | | | |
| Todoing voiding | • | L | | | Total Ga | Illons Purged | 383.h | <u></u> | 1 | | | | |
| | | D-1111 | | | | 9 1 | | | _ | | | | |
| | | DTW (wells | | | | | _ | 000 | | | | | |
| Time | Gallons | only) | pН | Cond. | NTU | DO | Temp. | ORP | Appearance | | | | |
| 1520 | 1.8 | | 9.02 | 0.55/-5/ | .768 | 0.11-1/6 | 20.63 | -29.1 | clouds | | | | |
| 1530 | 2.0 | | 8.92 | 5.505-Sh | 49.2 | 0,14-1 | 20.42 | -43.5 | clean | | | | |
| 1535 | 7. 2 | | 8.90 | 6.4978/ | 44.4 | 0.13.7/6 | 20.83 | -48./ | Clacy | | | | |
| 1538 | 2.4 | | 8.90 | 6,491-56 | | 0.15-14 | 20.77 | -50.4 | 04 | | | | |
| 1541 | 2.6 | | 8.89 | 0.49/5 | 39.0 | 0.14-16 | 20.7 2 | -51,9 | 04 | | | | |
| 1544 | 2.8 | | 8.90 | 6.489_SL | 34,6 | 0.19-16 | 26.7/ | -51.4 | cle_ | | | | |
| 1547 | 3,0 | | 8.93 | 6.484.54 | | 0.14.14 | 26,65 | -51.5 | | | | | |
| 1550 | 3,2, | | 8,92 | 0,993-15 | • | | 26.63 | -54.7 | da | | | | |
| 1080 | 3,2, | | 10,12 | 0,942.J.L | . 3 c. S | 0.12 h | 20,6 | 1 3 /. / | (7) | | | | |
| in | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | |
| | | | | | | | | | <u> </u> | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | <u> </u> | <u> </u> | | | <u> </u> | | | | |
| | | | | _ | Inform | | | | | | | | |
| Sample Met | hod(s) (ci | rcle):(Perist | altic pum | >/ Subme | sible pun | np / Bladde | r Pump / O | ther | | | | | |
| A 1- | !. | Ti | Dottle | Tuna | Droopri | ativo/Eiltrati | on. | Comments | | | | | |
| Analy | | Time . | | Type | | ative/Filtrati | I | Comments | | | | | |
| VOC | | 1600 | 3-40-6 | VOAs | HCI | | | | | | | | |
| Dissolved | | 1600 | 1-/L HOPE | 1-5001 HOM | BNO 1 | IRLD FILTERS | P | + Marcu | 7 . | | | | |
| Total M | | | | | | | | | Sept. | | | | |
| Chromi | | | | | | | | | | | | | |
| Total and \ | WAD CN | 1600 | 1-500 | L HOME | NA | | | | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | | | | | | | |
| SVC |)Cs | | | | | | | | | | | | |
| PCI | Bs | 1600 | 1/LA | <u> </u> | NA | | | | · · · · · · · · · · · · · · · · · · · | | | | |
| Red | ox | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| E-1T- | | Te.es | <u> </u> | | | | | | | | | | |
| End Time | - | 1615 | | | | | | | | | | | |
| | | | | Comme | nts / Exc | | | VEO (| | | | | |
| Presence of | floating pr | roduct? | ES MO | | Presence | e of sinking | product? | YES (NO | | | | | |
| | | | | | | | | | | | | | |
| | | *************************************** | | · · | | | | | | | | | |
| | | | ···· | | | | | | | | | | |
| | | | | | | | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington 01-34 Station Date I Sample: ID 2-31-00-34-10-6-0 Field Team: (Initials) Field Conditions INSING **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1405 3 Casing Volumes End Time 1705 1 Casing Volume Total Gallons Purged 3.9 50 llus DTW (wells Time Gallons only) Cond. NTU DO Temp. ORP Appearance pН 1633 2.5 7.17 19.97 8 0.538 20.4 6.12-1/2 -53.2 1636 2.7 7.16 0.539 4. 17.0 19.97 % -54.6 6.13-1K 19.93°C 0.5825L 14.7 0.14-12 -55.5 1639 2.9 7.15 -57.6 1642 7.14 6.5378 14,0 3. (6.15/16 19.96 145 7.13 0.536-8 12,2 -58.5 19.94 3.3 0.18.12 1648 0.536mS/c 12.1 -210 3.5 7.13 1992 7.12 -59.6 1651 3.7 19.91 Sample Information Sample Method(s) (circle): (Peristaltic pump/ Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments **VOCs** 1700 3-40-1 VOAs HCI Dissolved Metals 1-11 HPRE/1-SCOLL MAPE HAD, FIELD FILTERED 1700 + Mercung **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** Redox **End Time** 1705 Comments / Exceptions: YES / (NO YES /NO Presence of sinking product? Presence of floating product?

| | <u>_</u> - | 'SI AIEa | | | | ukwila, Was | - | icia Date | 4 | |
|--|-------------|---|--|--------------|--------------|---------------------------|--------------------------------|---|--|--|
| Station | I | DP-05 | Doeni | g i raint z, | Ocation |] | Date | 9/2/09 | : | |
| Sample: ID | · | 2-31-DP-05 | - 40-W-C |) | | Field Tea | ım: (Initials) | IB. | ************************************** | |
| Field Condition | ns | Sunny & C | | | | | | | | |
| | | <u>J</u> | | Duras | nfo rmo | tion | | | | |
| | , 1 | | 1 | | nformat | | Outres and Helenon | | | |
| Well Diameter (in | .) | <u> </u> | - | Pur | ge Metrio | | Submersible pu Bladder Pump | ımp | | |
| Well Depth (ft.) | ator (ft) | 44' | | | | | Ceristaltic Pum | • | | |
| Initial Depth to W Depth of Water C | | | | | | | Other:: | P | | |
| 3 Casing Volume | | ** | 1 | | | 1 | 3 30 | | <u>T</u> | |
| 1 Casing Volume | | | - | | | End Time | | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 1 | |
| , cusing rolame | | | _1 | | Total Ga | allons Purged Zna gallons | | | | |
| | | DTM. | | | | - ' | | | | |
| | | DTW (wells | | 0 1 | | 5.0 | - | 000 | A | |
| Time | Gallons | only) | pН | Cond. | NTU | DO | Temp. | ORP | Appearance | |
| 1751 | 1.0 | | 7.6/ | 0.58725/2 | / <i>25]</i> | O.IZugll | 23.60 | -74.9 | ch.A | |
| 1400 | 1./ | | 7.52 | 0.580.5/- | 1033 | 0.10712 | 23.07 | ~79.9 | The state of the s | |
| 1819 | 1.4 | | 7.58 | 0.581-5/ | 216 | 6.130/ | 22.72 | -89.3 | e Th | |
| 1823 | 1.5 | | 7.57 | 6.581-SL | | 0.13-1/4 | a 2.55 | -90.2 | cton | |
| 1826 | 1,6 | | 7,56 | 6,585-56 | | 0.13.1/ | 22.48 | - 71.0 | clus | |
| 1829 | 1.7 | | 7.55 | 0,5862 | | 0.14.16 | 22,44 | -91.6 | 191 | |
| 1832 | 1.8 | | 7.54 | 6.587.51 | | 6.14-1 | 22,40 | -92.1 | cha | |
| 1032 | 1.0 | | 1,5/ | 0.3 0/_)_ | , , , , , , | 0.0 | <i>Ray</i> . 0 | 12./_ | 122 | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | - | | | | | | | |
| | | | <u> </u> | | | | | | | |
| | | | | | | | | ļ | | |
| | | | | | | | | - | | |
| | | | | | | | | | | |
| | | | | Sample | e Inform | nation | | | | |
| Sample Meth | od(s) (ci | rcle): (Perista | altic pump | / Subme | rsible pun | np / Bladde | er Pump / Of | ther | | |
| , | | | | | | | | | | |
| Analy | | Time | | Туре | 1 | ative/Filtrati | on T | Comments | | |
| VOC | | 1845 | 3.40-L V | OAs | HCI | | | | | |
| Dissolved | Metals | 1845 | I-IL NOPE/ | 1.500-C HOPE | HNB/FIE | DFILTERED | + Men | <u>~</u> | | |
| Total M | etals | | | | _ | | | | | |
| Chromit | um VI | | | | | | | | | |
| Total and V | VAD CN | 1845 | 1500-1 | HOPE | NA | | | | | |
| TPH-Dx, 7 | ΓPH-Gx | | | | | | | | | |
| SVO | **** | | | | | | | | | |
| PCE | | | 1 | | | | | | | |
| Redo | | | | | | | | - 44 41 47 7 | | |
| reac | | | | | | | | | · · · · | |
| | | | | | <u>L</u> | | <u>.</u> | | | |
| End Time | | 1900 | | | | | | | | |
| | | | | Comme | nts / Exc | eptions: | | | | |
| Presence of | floating pr | oduct? Y | ES/NO | | | e of sinking | product? | YES / (VC |) | |
| | | P | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | *************************************** | | | | | | ****************** | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Station Date 2-31- DP-11-10-W-0 Sample: ID Field Team: (Initials) JR Field Conditions Clear **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) 141 Well Depth (ft.) Bladder Pump Initial Depth to Water (ft.) Peristaltic Pump Other:: Depth of Water Column 3 Casing Volumes @ 1925 Start Time 1 Casing Volume End Time 2020 Total Gallons Purged 3,5 gallan DTW (wells only) Gallons Cond. NTU **ORP** Time DO Temp. Appearance рΗ 66.2 1945 7.68 0.755.5/ 0.11-1/1 18.96 2.0 -53.0 2.2 1948 0.756-56 42.0 18.95 -54.6 7.67 0.11-1/2 1951 2,4 6.759-8 320 6.10m/L 7.66 18 91 -56.8 7.67 6.762-SL 29.9 1964 2.6 18.94 -58.1 7.8 7.71 6.763nSL 1957 26.6 18.89 -58.8 2600 3.0 272 6.764-SL 25.8 18.86 - 66.7 3.2 7,72 -61.8 2003 0.746-Sh 24,1 18.87 Sample Information Sample Method(s) (circle): (Peristaltic pump) Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2015 3-40~L VOAS HCI + Mercany **Dissolved Metals** 2015 1-12 HOPE/1-500-LHINE HAVO, /FIELD FICTERED **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** Redox **End Time** 2020 Comments / Exceptions: YES (NO) YES (NO) Presence of floating product? Presence of sinking product?

| | 2- | -31 Area | | | | | | ield Data | a |
|--|-------------|---|------------------------|------------|-------------|---------------------------------------|---------------------------------|--------------|---------------------------------------|
| 01.11 | | 00 4 5 | Boein | g Plant 2, | Seattle/Tu | ukwila, Was 1 | | 0/ / | |
| Station | | DP-40 |) plan | | | Field Tea | Date m: (Initials) | 9/2/09 JB | · · · · · · · · · · · · · · · · · · · |
| Sample: ID Field Condition | ons | 2-31-00 INSIDE | / - (10) -/ | 0-6-0 | | I leid lec | irri. (irritiais) | ا ي ي | |
| Tiela Coriani | 3110 | LWSIDE | | | | | | | |
| | | | | | nforma | | | | |
| Well Diameter (i | า.) | 14 | | Pur | ge Metho | d (circle): | Submersible p | | |
| Well Depth (ft.) | | 14' | | | | | Bladder Pump Peristaltic Pum | | |
| Initial Depth to V Depth of Water (| | | | | | | Other: : | <u>P</u> | |
| 3 Casing Volume | | | | | | Start Time | | | - - |
| 1 Casing Volume | | | | | | End Time | | | |
| | | | | | Total Ga | allons Purged | 3.0 gol | | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 2035 | 1.5 | | 4.72 | 1.129 5/4 | 34.3 | 0.42-7/1 | 19.76 | -46,5 | clean |
| 2038 | 1.7 | | 7.71 | 1.129481 | 23.4 | 6.33 | 19.73 | -479 | Cle |
| 7041 | 1.5 | | 7.70 | 1.125~8_ | 20.3 | 0,23-3/2 | 19.71 | -490 | Chear |
| 7044 | 2.1 | | 7.69 | 1.125-8 | 19.6 | 0.19-1/ | 11.69 | -50.0 | Class |
| 2097 | 2,3 | | 7.68 | 1.12525/ | | 0.18/ | 19.66 | -50,5 | - de |
| 2050 | 25 | | 7.67 | 1.125_5h | 20.1 | 0.17-12 | 1957 | -51.2 | د ا |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | ¥ | | | |
| | | | | ļ | ļ | · · · · · · · · · · · · · · · · · · · | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | _ | | | | | | | <u> </u> | |
| <u> </u> | | | <u> </u> | Comoral | _ lofo you | | | | |
| 0 14.15 | l1/> | uala) (Daviata | | • | e Inform | | r Dumn / O | thor | |
| Sample Met | noa(s) (ci | rcle) (Perista | uuc pump | Subme | rsible pull | ip / blaude | rump/ C | , II I E I | |
| Anal | ysis | Time | Bottle | туре Туре | Preserva | ative/Filtrat | ion | Comments | |
| VO | Cs | 2100 | | ~L VOAS | | | | | |
| Dissolved | d Metals | 2100 | 1-14-108 | E/1-500-L) | PPK 1-1M | OSFIBLO FA | TRED. | + Mercu | 7 |
| Total M | letals | | | | <u> </u> | | | | ··· |
| Chromi | * | | | | ļ | | | | |
| Total and ' | | | | | | | | | ÷ . |
| TPH-Dx, | | ļ | | | | | | | |
| SVC | | 2100 | 4-500, | 1.AF | NA. | | 2 5)M PA | W F . | 2.8000, |
| PC | | <u> </u> | - | | | | | | |
| Red | OX | | | | | | | | |
| End Time | 2 | 2115 | <u> </u> | | | | <u> </u> | | |
| | J | L -11 3 | | <u> </u> | / F | | | | |
| Presence of | floating pr | oduct? Y | ES /NO | Comme | nts / Exc | epτιons: e of sinking | product? | YES /(NC | 3 |
| | 9. | | | | | | | | |
| | | | | | | | | | |
| | | *************************************** | | | | | | | |
| | | | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date | 9/2/09 Station Field Team: (Initials) Sample: ID 2-31-0P-1140-W-0 JR Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) Reristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column 2125 3 Casing Volumes Start Time End Time 2240 1 Casing Volume 4.5 4-3 Total Gallons Purged DTW (wells only) Cond. NTU DO Temp. **ORP** Appearance Gallons рН Time 2.0 -60.1 2145 7.96 0.839. 0.5/_1/2 18.91 102 7203 3.0 794 18,59 -72.9 1179 293 18.59 -79.7 2209 3.4 1223 0,831,56 1213 18,56 2215 7.94 -75.7 1270 18.54 -75.9 0.832.4 2218 3.9 7.93 0.833 LL 1206 18.52 ~76.3 2221 4.1 7.97 Sample Information Sample Method(s) (circle) Peristaltic pump / Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments **VOCs** 2230 3-40-L UDD, HCI Dissolved Metals 1-14 HODE 11-500 LHOOF HADS FILTERCO 2230 Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** Redox **End Time** 2240 Comments / Exceptions: YES / NO YES / NO Presence of sinking product? Presence of floating product?

| | 2- | SI Area | | | | ater Sar ukwila, Was | | ieiu Data | , |
|-------------------------------------|--|-----------------|--|------------|-------------|--------------------------------|--------------------------------|--------------|--|
| Station | I | 08-07 | boein | y Flant 2, | Seame/10 | ikwiia, vvas | Date | 9/3/09 | : |
| Sample: ID | | -2.81-DP-0 | 7-12-11 | | | Field Tea | ım: (Initials) | IB | |
| Field Condition | ons | INSIDE | 3-70 W | | | • | | | |
| | | | | D I | | lian - | | | |
| | | - 11 | 1 | Purge I | | | Oh | | |
| Well Diameter (ir | ۱.) | 14 | | Pur | ge ivietno | | Submersible po Bladder Pump | nmb | |
| Well Depth (ft.) Initial Depth to W | lator (ft) | 141 | - | | | | Peristaltic Pum | | |
| Depth of Water (| | | 1 | | | | Other:: | | |
| 3 Casing Volume | | | 1 | | | , | 1570 | 41-20-1-20-1 | |
| 1 Casing Volume | | | | | | End Time | 1630 | | |
| | · | | | | Total Ga | allons Purged | 2.7 galler | | _ |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рΗ | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1549 | 1.8 | T 7 | 7.23 | 1.113,5% | | 0.47 ple | 21.07 | -37.2 | clean |
| 1552 | 1.9 | | 7.38 | 1,111-5/- | 37.0 | 0.47-12 | 21.06 | -39.5 | den |
| | 2.0 | | 7,47 | 1.111-Sh | 28.0 | 0.47-y/L | 21.05 | -71.0 | Cle |
| 1555 | 2.1 | | 7.55 | 1,110,5 | 26.1 | 0.47m/c | 21.04 | -42.(| Cle NO |
| 1558 | 2.2 | | 7.60 | 1.10956 | 25.3 | 0,4844 | 21.03 | -43.3 | ch |
| | | | 7.65 | 1.109 \$ | 24.8 | 0.47 L | 21.03 | *43.9 | Clea/ |
| 1604 | 2.3 2.4 | | 7.68 | 1.109 \$ | | 0.47-1/2 | Z1.01 | -44. (| cher |
| 1607 | C.5- | | 11100 | 1110/2 | 45, 7 | 1 1,5/2 | 0,10,1 | | 1002 |
| | | | | | | | | | |
| | 1 | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | <u> </u> | | | | |
| | - | | | | | | | | |
| | | <u> </u> | | Comple | Inform | | | | |
| 0 Mail | 1/ - \ | | 11:5 | | | | or Dump / O | thor | |
| Sample Met | nod(s) (ci | rcle): (Perista | aitic pum | oy Submei | rsible puri | ip / Bladde | er Pump / O | triei | |
| Analy | /sis | Time | Bottle | е Туре | Preserva | ative/Filtrati | ion | Comments | |
| Voc | | 1115 | 3-40-L | | HCI | | | | |
| Dissolved | | 11.76 | | | | W FILTR DES | 4 | m_ | |
| Total M | | 20101 | V-1C AVIE | Manual 11 | 3/110 | G F/C) H CC- | | 7 | |
| Chromi | | | | | | | | | |
| Total and | | 14.15 | 1.500 | LHOPE | NA | | | | |
| TPH-Dx, | | 7 35 4 5 | , , , , , , | ; ·V [} | / | | | | |
| SVC | | | | | | | | | |
| PCI | | | | | † | | | | |
| Red | | | 1 | | | | | | |
| 1,00 | | | | ASARSSINE | | | | | |
| | ······································ | 1120 | | | I | | | | The state of the s |
| End Time | | 1630 | | | | | | | |
| | | | (EQ. / | | nts / Exc | eptions: | | VEC INT | . |
| Presence of | floating pr | oduct? Y | ES / | <i>r</i> ` | Presenc | e of sinking | product? | YES / NC | <u></u> |
| | | | | | | | | | |
| | | | | | | | | | , |
| | | | | | | | | | |
| | | | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Station DP-38 Date 9/3/01 Field Team: (Initials) Sample: ID 2-31-DP-38-12-U-0 Field Conditions INS 106 **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Well Depth (ft.) Bladder Pump IL" Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1630 3 Casing Volumes End Time 1140 1 Casing Volume Total Gallons Purged 36gg/hus DTW (wells Gallons only) Cond. NTU DO Temp. ORP Appearance Time рΗ -42.5 1456 2.2. 8.07 0.821 SL 103.9 20,61 0.39~5/1 1700 2.4 0.823mS/L 108.2 -39.6 8.08 6.21mlL 20,60 2.6 1703 8.10 6.873LL 105,1 6.19m/L 2059 - 39.0 0.824-71 0.24-11 1706 7.8 98.7 8.11 -39.2 20.60 1709 8.11 6.8251 84,1 0.20-16 -38.8 3.0 20.59 0.825-1/2 8.12 86.2 1712 3.2 6 24/ 20,59 -38.3 900 - 39. 3 8.13 0,820sk 20,59 1715 3.4 Sample Information Sample Method(s) (circle): (Peristaltic pump/ Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration **VOCs** 1730 3-40-L VOAS HCI **Dissolved Metals** + Mercury 1730 HLHOOE /1-SEAL HODE TANG, /FIELD FILTERED **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs** 1730 2 SIM PAIR + 4-500_L AG NA 2 3VOC . **PCBs** NA 1730 2-16 AG 2 SIM DULY 1 2 SVOCE 90 Redox End Time 1740 Comments / Exceptions:

Presence of sinking product?

Grandwater producing very slas a 10'-14. Collecting sample was impractical.

Go down to 12'-16' to collect sample.

Presence of floating product?

YES /ND

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

YES/MÒ

| | 2 | -31 Area | Data G | ap Gro | oundwa Seattle/Tu | ater Sar ıkwila, Was | npling F | ield Data | l |
|--|-------------|-----------------|--------------|------------|---|---|--------------------------------|--|---------------------------------------|
| Station | :3 | DØ-07 | Doeing | J Flatte, | Jeaner I C | l via | Date | 9/3/09 | |
| Sample: ID | | 2-31-08-0 | 7-40-4 | -0 | | Field Tea | m: (Initials) | | |
| Field Condition | ons | ENSINE. | 1 - 7 0 - 10 | | | | | | |
| | | | | Duran | n form of | ion | | | |
| | | | ! | Purge li | | | Culturaraible n | · Iman | |
| Well Diameter (in | 1.) | 161 | | Pul | ge Methot | | Submersible po Bladder Pump | ump | |
| Well Depth (ft.) Initial Depth to V | Vater (ft.) | 44' | | | | | Peristaltic Pun | ĬD- | |
| Depth of Water (| | | | | | | Other:: | | |
| 3 Casing Volume | | | | | | Start Time | 1735 | | |
| 1 Casing Volume | Э | | | | | End Time | 1850 | | |
| | | | | | Total Ga | llons Purged | 25 galle | . <u>, </u> | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1809 | 1, 2 | | 7.82 | 0.635-56 | 705 | 0.47mSL | 20.57 | -78.1 | cland |
| 1814 | 1.4 | | 7.88 | 0.633nX | .631 | 6.23.5/- | 20.58 | - 80,7 | cl. g |
| 18/8 | 1.6 | | 7.89 | 6. 632-54 | 608 | 6.17-y/m | 20,58 | - 82.0 | chily |
| 1874 | 48 | | 7.94 | 0.632.51 | 192 | 6,57/4 | 20.58 | -83.8 | closh |
| 1832 | 2,0 | | 7.95 | 0,631_8 | 204 | 0.14-16 | 20.56 | - 85.0 | de |
| 1835 | 2.2 | | 7.96 | 6,631 | 187 | 0.17-11 | 20.58 | → 82.8 | oly |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | <u></u> | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | <u> </u> | |
| Sample Met | , , , | ircle) (Perista | | / Submer | | ıp / Bladde | | | |
| Analy | | | | | | ative/Filtrati | on T | Comments | |
| VO | | 1845 | 3-40 NL | | Hel | | | | |
| Dissolved | | 1845 | 1- L HOPE | 11-90L HAY | 1409/FIE | LO PILTERSO | + Me | rewy | · · · · · · · · · · · · · · · · · · · |
| Total M | *** | <u> </u> | | | | 200000 | | | |
| Chromi | | 1015 | ļ | | 4 - 5 | *************************************** | | | |
| Total and | |)845 | 1-500, | L. HOPE | NA | | | | |
| TPH-Dx, | | | | | | | | A SUS WEST | |
| SVC | | | <u> </u> | | | | | | |
| PC | | | ļ | | | | | | |
| Red | OX | | - | ****** | | | | | Luciani. |
| End Time | • | 1850 | 7 | | l | | | | |
| End Time | | 1.00 | | | | | | | |
| Presence of | floating pr | roduct? Y | ES / | Comme | nts / Exce Presence | e of sinking | product? | YES / 🚾 |) |
| | | | | | | | | | |
| | | | | | *************************************** | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington DP-48 Station Date 9/3/08 Z-31.0P-48-10-W-0 Field Team: (Initials) Sample: ID JB Field Conditions THEIDE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) 141 Well Depth (ft.) Bladder Pump Peristalfic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1940 3 Casing Volumes End Time Z035 1 Casing Volume 2,3 gall Total Gallons Purged DTW (wells Gallons only) рΗ Cond. NTU DO Temp. ORP Appearance Time 2000 1.5 90.8 0.8 19.25 -12.6 8.09 0.677-5/ 2003 1.6 8.12 6.677-56 69.3 6.38= 19.20 -14,5 8.14 19.14 °C 2.00g 6.676 S 52.1 6.32-7 -17.2 1.8 6.31 m/L 19.11 % 1.67548 431 -18, 2 2011 1.9 8.15 2015 8.17 6 675-4- 42.2 0.27-1/2 19,672 -19,2 2.0 6.65 \$4 40.5 8.18 -Z6.0 6,23-1L 19,06% 2018 2.1 Cleur Sample Information Sample Method(s) (circle): Peristaltic pump) Submersible pump / Bladder Pump / Other Analysis Time **Bottle Type** Preservative/Filtration Comments **VOCs** 2030 3-40-L VOAS Dissolved Metals HNOS/FILTEDED-FIELD + Mereving 1-)LHOPE/1-SOOLHONE 2030 **Total Metals** Chromium VI Total and WAD CN Z030 MA 1-500-L HOPK TPH-Dx, TPH-Gx **SVOCs PCBs** Redox ZO 35 **End Time** Comments / Exceptions: YES / (10) Presence of sinking product? YES /NO Presence of floating product?

| | 2- | o i Area | | | | ukwila, Was | npiing r shinaton | ieiu Data | a |
|----------------------------------|-------------|----------------------|-----------|----------------------|------------|----------------|---|-----------|--|
| Station | | DP-24 | DOGII | ig i idili Z, | Coattio/ I | | Date | 9/3/09 | |
| Sample: ID | | Z-31-0P-2 | 4-12-W | -0 | | Field Tea | m: (Initials) | JB | |
| Field Condition | ons | | WSIPE | | | | | | |
| | | | | Purge I | nforma | tion | | | |
| Well Diameter (ir | 1.) | 1" |] | _ | | | Submersible p | amp | |
| Well Depth (ft.) | | 16' | | | | | Bladder Pump | | |
| Initial Depth to W | | | - | | | | Peristaltic Puri | Þ | • |
| Depth of Water 0 3 Casing Volume | | | · | | | Start Time | Other: : | | |
| 1 Casing Volume | | | 1 | | | End Time | | | |
| t Casing Tolaini | | | J. | | Total Ga | ailons Purged | 3.2 gall | -3 | |
| | | DTW (wells | : | | • | | V | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 2116 | Z. 5 | | 143 | 0.815_5/_ | 82.3 | 0.70-1/4 | 21.97 | -46.7 | cloudy |
| 2120 | 2.6 | | 9.41 | 0.915.9 | 78,2 | 0.31-1/2 | 21.96 | -46.5 | cloudy |
| 2123 | 2.7 | | 9.41 | 6.819mS | 61.7 | 0,29mg/L | 21.96 | -49.5 | closely |
| 2126 | 28 | | 9,39 | 0.314.SL 6.314.SL | 63.8 | 0.25.12 | 21.95 | -45.9 | charing |
| 2129 | 2.9 | | 939 | 6.23_/4 | 21.94 | -45.4 | cleary | | |
| 2137 | 3.0 | | 9.59 | 6.21-/ | 21.95 | -41,5 | cleaning | | |
| | | | | | | | | | |
| | | | <u> </u> | | | | | | |
| | | | | <u> </u> | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | 1 | | | | | | |
| <u> </u> | <u> </u> | | | Sample | Inform | nation | | | |
| Sample Met | hod(s) (ci | rcle): <u>Perist</u> | altic pum | | | | er Pump / O | ther | |
| Analy | vsis | Time | Bottl | e Type | Preserv | ative/Filtrati | ion | Comments | 3 |
| VO | | 2140 | 3-40- | | 1401 | | | | |
| Dissolved | d Metals | 2140 | 1-14 HOPE | 1-500-2HME | | IELO FILTERES | > | | |
| Total M | 1etals | | | | . 0,. | | | | |
| Chromi | um VI | | | | | | | | |
| Total and \ | WAD CN | 2146 | 1-500- | LHOPE | NA | | | | |
| TPH-Dx, | TPH-Gx | | | | | ··· | | | |
| SVC | | | | | | | | | 4 14 A V 4 V 4 V 4 V 4 V 4 V 4 V 4 V 4 V 4 |
| PCI | | | | | | | | | |
| Red | ΟX | | | 2075/81841 | | | | | |
| | the many to | | | | | | | | |
| End Time | € | 2150 | | | | | | | |
| | | | | Comme | nts / Exc | eptions: | | | |
| Presence of | floating pr | oduct? \ | 'ES /NO |) . | Presenc | e of sinking | product? | YES / | 9 |
| | | | | | | | | | |
| | | | | | | | *************************************** | | |
| | | | | | | | ****************** | | *************************************** |

| Sample: ID Field Conditi | ons | 2-31-0P- | | U-0 | | Fleid Tea | m: (Initials) | -JB | |
|--------------------------------------|--------------|-------------------------------------|--|--------------|-------------|---|-----------------|-------------------|-------------|
| | | | - D/1110 | Durana | | | | | |
| Vall Diameter (i | in) | | 1 | Purge I | | | Submersible pu | ımn | |
| Vell Diameter (i Vell Depth (ft.) | in.) | 14) | 1 | Fui | ge Metro | | Bladder Pump | imb | |
| nitial Depth to \ | Water (ft.) | | 1 | | | | Peristaltic Pum | Ò | |
| epth of Water | | |] | | | | Other: : | | |
| Casing Volum | | | | | | | 1435 | | |
| Casing Volum | е | |] | | T. I. I. O. | End Time | 16/0 | 1. | · |
| | | | | | iotai Ga | allons Purged | 4.0 90 | | 1 |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | pH r | Cond. | NTU | DO | Temp. | ORP | Appearanc |
| 15/0 | 2.4 | | 7.74 | 0,529-2 | 211 | 0.30 // | 18.90°C | 5,2 | clardy |
| 1518 | 2.7 | a" - | 799 | 0,525. | 150 | 0.20m/L | 18.86°C | -8,4 | <10 Mg |
| 1524 | 3.0 | | 8,25 | 0:526.5 | 125 | 6.19- | 18.67°C | -15.7 | clus |
| 1532 | 3.3 | ×4 | 8.33. | 0.523.4 | 106.1 | 0,210/2 | 18,76°C | -18.5 | 10 |
| 1540 | 3,6 | | 8.49 | 6,524 L | 84.8 | 0,22-1 | 18,566 | -27.9 | 1.18cm |
| 1543 | 3,7 | | 8.53 | 0,522-51 | 86.1 | 0.23 | 18,620 | -31.2 | Cleud |
| 1546 | 3,8 | | 8,57 | 65234 | 84.3 | 0.23-22 | 18.66°C | - 33.7 | (lew) |
| | | | 1 | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | <u> </u> | . | | | | | |
| | | | | | | | | | |
| ············· | | | | | | | | | |
| | | | | Sample | Inform | ation | | | |
| Sample Met | hod(s) (ci | rcle): Perista | altic pump | - | | | r Pump / Ot | her | |
| Amali | | and the second second second second | The state of the s | | | ative/Filtrati | | | |
| Anal VO | | Time | 1 | Type | | auve/Filliau | 011 | Comments | <u> </u> |
| Dissolve | | 1550 | 3.40 L | 11-500-LHOIE | 4NO /1 | | 1 Me | | |
| Total N | | 1550 | 1-12 HUYE | MALHUE | 77/03/1 | FIXED FILTERES | 1 111 | CLU | |
| Chromi | | | | | | ~ ~~~ | | | |
| Total and | | | 1, | | | | | | |
| TPH-Dx, | | | | | | | | ···· | |
| SVC | | | | | | , | | ' | |
| PC | | 1550 | Z-12 / | 4C- | NA | | | | |
| Red | ох | | | | | | | | |
| | | | | | | | | | |
| End Time | e . | 1610 | 7 | | | | | | |
| | | | | Comme | nts / Exce | entions: | | | |
| Presence of | floating pro | oduct? Y | ES/NO |) | | of sinking | product? | YES /(NO | |

| | 2- | -31 Area | Data C | Gap Gro | oundwa | ater San | npling F | ield Data | | | | |
|------------------------------------|-------------|------------------|---------------------------------------|---|---------------------------------------|------------------|-------------------------------|--------------|--|--|--|--|
| Otation | 1 | DP -49 | Boeing | g Plant 2, | Seattle/10 | ukwila, Was T | nington Date | alala | | | | |
| Station Sample: ID | ν. | 2-31-DP-4 | 9-11-11- | ^ | · · · · · · · · · · · · · · · · · · · | Field Tea | m: (Initials) | 9/3/04 3R | | | | |
| Field Condition | ons | 3000 2 | | | | 1 | / | 123 | | | | |
| = | | | | D | fo www.o.i | Han | | | | | | |
| | , | , , , ; | | Purge I | | | Submersible p | | | | | |
| Well Diameter (in Well Depth (ft.) | 1.) | 14' | | Pur | ge Metrio | , | Submersible p Bladder Pump | ump | | | | |
| Initial Depth to W | ater (ft.) | 17 | | | | | Peristaltic Pum | np) | | | | |
| Depth of Water C | | | | | | | Other:: | | | | | |
| 3 Casing Volume | | | | | | Start Time | 1545 | | | | | |
| 1 Casing Volume |) | | | End Time 1650 Total Gallons Purged 4,050 | | | | | | | | |
| | | | | | Total Ga | mons ruigeu [| 410gelles | 3 | j | | | |
| Time | Gallons | DTW (wells only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance | | | |
| 1626 | 3.0 | | 8,74 | 0.579,51 | 19,2 | 0.53.L | 19.45 | -25:6 | cles | | | |
| 1630 | 3,2 | | 8,68 | 0.83.9. | 11.9 | 0.43-11 | 19.34 | -Z8, O | clen | | | |
| 1633 | 3,4 | | 8.68 | 6.512-5% | 10.38 | 6,40-14 | 19,38 | -295 | 7 | | | |
| 1636 | 3.6 | | 8,68 | 6,5125 | 9.84 | 6:38-11 | 19.41 | -300 | 4 | | | |
| | | | | | ā · | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | - | | | | |
| | <u> </u> | | | 1 | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | - | <u> </u> | | | _ | | | | |
| | | | | | | | | | | | | |
| | | | 7 | | | | | | | | | |
| L | | | | Sample | Inform | ation | L. | | | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | ıltic pump | | | | r Pump / O | ther | | | | |
| Analy | sis . | Time | Bottle | . Туре | Preserva | ative/Filtrati | on | Comments | | | | |
| VOC | | 1640 | 3-40, | -L VOAS | HOI | | | | | | | |
| Dissolved | Metals | 1640 | 1-1LHDAE/ | I SOOL HOPE | HN03/F | TELD FILTERE | <u> </u> | + Mercu | 2 | | | |
| Total M | | | | | | | | | | | | |
| Chromit | | | | | | | | | | | | |
| Total and V | | 1640 | · · · · · · · · · · · · · · · · · · · | -L HOPE | NA | | | | | | | |
| TPH-Dx, | | 1840 | 2-40-LV | AS/2-5002 | 46- H9 | on VOAs | | | · · · · · · · · · · · · · · · · · · · | | | |
| SVO | | | | | | | | | ANNUAL AN | | | |
| PCE | | | - | | | | | | | | | |
| Redox | | | | | | | | | | | | |
| End Time | } | 1650 | 1 | | <u> </u> | | | | | | | |
| | | | | Comme | nts / Exc | eptions: | | 3400 | | | | |
| Presence of | floating pr | oduct? Y | ES (NO |) | | e of sinking | product? | YES / NO | <u>)</u> | | | |
| | | | | | | | ····· | | | | | |
| | | | | | | | | | | | | |
| | | | ******* | | | | | | | | | |

| ation | | DP-29 | | | | F: | Date | 9/8/09 | |
|------------------------------|----------------|-----------------|------------|------------|------------|-----------------------|---------------------------------|--|---------------|
| ample: ID eld Conditi | one | 7-31-DP- | | | | Field lea | m: (Initials) | 工8 | |
| ela Conani | 0115 | <u> Jupan</u> | c Chen | | | | | | |
| | | | | | nformat | | | | |
| ell Diameter (i | n.) | | | Pur | ge Metho | • | Submersible pu | ımp | |
| ell Depth (ft.) | Valor (ft.) | 141 | | | | | Bladder Pump Peristaltic Pum | Contraction of the Contraction o | |
| tial Depth to Vepth of Water | | | | | | · · | Other: : | P P | |
| Dasing Volum | | | | | | Start Time | 1645 | | 1 |
| Casing Volum | е | | : | | | End Time | 1750 | | |
| | | | | | Total Ga | llons Purged | 4.05alle | |] |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearanc |
| 1715 | 2.4 | : | 7.15 | 0.660.9 | . 46,2 | 0.2/1/ | 19.39 | -31.2 | clean |
| 1718 | 2,6 | | 7.94 | 0,659-8- | 41.0 | 0.22-1/ | 19.49 | - 30.7 | cher |
| F721 | 2.8 | | 7.95 | 6,659~X | 28,0 | 6. 25 K | 19,56 | -31.7 | chy |
| 1727 | 3.2 | | 7,97 | 6,659.8 | 28.0 | 6.25g/K | 19,59 | -32.6 | clear |
| 1730 | 34 | | 7.97 | 6,659-18 | 26.8 | 0.26-1L | 1956 | -34/ | clen |
| | | | | | | | | | : |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | - : | | |
| | | | | | | | | | <u> </u> |
| | 1 | | | | | | | | |
| | . | | | | | | | | |
| | | <u> </u> | <u>!</u> | Sample | Inform | otion | | | |
| ample Met | hod(s) (ci | rcle): (Perista | ıltic pump | - | | | r Pump / Ot | her | |
| Analy | zis | Time | Bottle | e Type | Preserva | ıtive/Filtrati | on | Comments | |
| VO | | 1730 | 3-40- | | 401 | | | | |
| Dissolved | | 1730 | 1-11 HDPE | . / | . 1.1 | FIELD FLOT | 00ED | 2 Men | 2 |
| Total M | letals | | | | | , | | | |
| Chromi | um VI | | | | | | | | • |
| Total and ' | WAD CN | 1730 | 1-500-1 | - HOPE | NA. | | | | |
| TPH-Dx, | TPH-Gx | 1730 | | 6/2-40-LVa | SNA/ | HC | | | |
| SVC | Cs | | | | l l | | | | |
| PC | 3s | | | | | | | | |
| Red | ох | | | | | | | | |
| | | 1 | l 1 | | | | | | |
| End Time | | 1750 | <u> </u> | | | | | | \ |
| rocense of | floating | oduota Vi | EQ NIO | Comme | nts / Exce | ptions: of sinking | product? | YES NO | |
| resence of | noaung pr | oduct? YI | ES (NO | | riesence | or sinking | product? | IES/NO |) |
| | | | | | | | | | ************* |

| | L - | 'SI Alea | | | | kwila, Was | | icia Data | | |
|--------------------|------------|----------------|-------------|-------------|---------------------------------------|--|-----------------|---|--------------|--|
| Station | I | DP-37 | poeing | y Fidill Z, | ocaliic/10 | rvina, vvas | Date | 218/07 | | |
| Sample: ID | | 2-31-DP-3 | 7-10-W. | 0 | | Field Tea | m: (Initials) | JB | | |
| Field Condition | ns | | ly evenin | | | | | | 10 10 | |
| | | | 5 | ,) | | • | | | | |
| | , | | | Purge I | | | | | | |
| Well Diameter (in | .) | 1" | | Pur | ge Method | | Submersible pu | mp | | |
| Well Depth (ft.) | | 141 | | | | | Bladder Pump | | | |
| Initial Depth to W | | | | | | - | Peristaltic Pum | 2_ | | |
| Depth of Water C | | | | | | Start Time | Other:: | | - | |
| 3 Casing Volume | | | | | | End Time | 1310 | | | |
| 1 Casing Volume | | L | • | | Total Ga | llons Purged | 45 galle | | | |
| | | | | | TOTAL GA | | 4.5 94112 | | | |
| _ | | DTW (wells | | | | | | | _ | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance | |
| 1819. | 2,2 | | 8.52 | 0.64925/2 | 155 | 0.26 m/L | 17.60 | -64.1 | 1/oug | |
| 1826 | 2.5 | | 857 | 0.642.5 | 107 L | 0.15-0/4 | 17.54 | -72.0 | US | |
| 1844 | 3,6 | | 8.54 | 6.636.SL | 55 R | 0.13~14 | 17.42 | -78.2 | clearing | |
| 1847 | 38 | | 8,48 | 6.631 N | 47.1 | 0.13-1 | 17.35 | -81-9 | ch d | |
| 1850 | 4.0 | | 847 | 0,634ns | 47,2 | 0.13-0/1 | 17.32 | -82,7 | clear | |
| 1853 | 4.2 | | 8.47 | 0.6522 | 47.8 | 0.13-14 | 17.31 | -83,8 | chante | |
| 1022 | 1.0 | | 3,4 / | 0.00000 | 7.1.0 | 12.11.02/12 | | | | |
| | | | <u> </u> | | | | | | | |
| | | <u> </u> | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | ļ | | | , | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | <u> </u> | | | | |
| | | - | | | Inform | | | | | |
| Sample Meth | nod(s) (ci | rcle). Perista | altic pump | y)/ Submer | sible pum | p / Bladde | er Pump / Ot | ther | | |
| Analy | unio. | Time | Pottlo | Typo | Drocorys | ative/Filtrati | on | Comments | | |
| Analy | | Time | T | Туре | 1/0 | | T | Comments | | |
| Voc | | 1900 | 3-40-2 | | 140 | | | | | |
| Dissolved | | 1900 | 1-11.110PE/ | 1-500-LHOPE | HNO3/F | IGLO FICTERED | f | Mercury | | |
| Total M | | | | | | | | | | |
| Chromit | | | | | | | | | | |
| Total and V | | | | | | | | | | |
| TPH-Dx, | ГРН-Gx | | ļ | | | | | | | |
| SVO | Cs | | | | | <u></u> | | | | |
| PCE | 3s | 1900 | 2-1L | AG | NA | | | | | |
| Redox | | | | | | | | | | |
| | | | | | | | | | | |
| End Time | | 19/10 | 7 | | | | | | | |
| End fille | | | | | | ntie = = : | | | | |
| Dunas | fi = = 1! | andriato V | | Comme | nts / Exce | eptions: | nroduct? | YES / NO | } | |
| Presence of | noating pr | oduct? Y | ES //NO | <u>/</u> | riesence | of sinking | product | 123/110 | <u>-</u>) | |
| | | | | | | | | | e | |
| | | | | | ****** | | | *************************************** | | |
| | | | | | · · · · · · · · · · · · · · · · · · · | | | | | |
| | | | | | | | | | | |

| | 2. | -31 Area | | | | | | ield Data | l |
|---------------------------------------|--------------|---|-----------|------------|--|--|-----------------------|-----------------|---|
| Otrotion | | 00 00 | Boein | g Plant 2, | Seattle/Tu | ıkwila, Was | | 0/-1 | |
| Station Sample: ID | | 2-31 DP | | 0-2-0 | | Field Tea | Date m: (Initials) | 9/8/09 J8 | |
| Field Condition | ons | | Eveno- | | | 1 Tiola Too | arr. (miliaio) | 112 | |
| | | | | 7 | lnformo: | Hion | | | |
| Wall Diameter (i | n) | 1 | | | I nforma t | | Submersible pu | ımn | |
| Well Diameter (ii Well Depth (ft.) | 11.) | 14' | | Fui | ge Melilo | | Bladder Pump | iiiih | |
| Initial Depth to V | Vater (ft.) | | | | | and the same of th | Peristaltic Pum | | |
| Depth of Water (| | | | | | | Other:: | | - |
| 3 Casing Volume | | | | | | | 1900 <u>-</u> | | - |
| 1 Casing Volume | = | | 4 | | Total Ga | End Time Illons Purged | 7016 2,5911 | | |
| | | DTM (malle | | | | | January Company | | . |
| Time | Gallons | DTW (wells only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1935 | 2,0 | | 8.47 | 0.519-5/ | 38,4 | 0.32~16 | 17.93 | -30.9 | clea |
| 1938 | 2,1 | | 8.46 | 0,518.5 | .39 | 0.32-1/ | 17.89 | -30.4 | dee |
| 1943 | 2.2 | ·. | 848 | 6,518.8 | 2.3.7 | 0.35/6 | 17,80 | -29-5 | -leaning |
| 1947 | 2.3 | | 8.48 | 6,517,52 | | 0.31-1/ | 17.73 | -29.0 | Cley |
| 1950 | 24 | | 8.4-8 | 0,517-1 | 18.64 × | 6.31-1/ | 17.71 | - 7.8,9 | des |
| | | | | | 12 Final | turbidity | measured with | no flow-through | cell |
| | | | | | | | | | |
| | 1 | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | ` | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | and the second second | | Sample | e Inform | ation | | | |
| Sample Meth | nod(s) (cii | rcle): leerista | Itic pump |) / Submei | rsible pum | p / Bladde | r Pump / Ot | her | |
| Analy | /sis | Time | Bottle | Type | Preserva | ative/Filtrati | on | Comments | |
| VOC | | 2000 | 3-40 L | | HCI | | | | |
| Dissolved | Metals | 2000 | | 11500-1401 | 1 | FIELD FLUER | rr() | +/ | Gronz- |
| Total M | letals | | | | 3. | | | | |
| Chromit | | | | | | | | | |
| Total and V | | | | | | | | | |
| TPH-Dx, | | | | | | | | | |
| SVO | | | | | | | | | |
| Redo | | | | | | | | | *************************************** |
| Neut | JX | | | | | | | | |
| End Time | | 2016 | <u> </u> | ··· | <u> </u> | | | | |
| | | | | Comme | nts / Exce | ptions: | | | |
| Presence of | floating pro | oduct? Yf | ES/NO |) | | of sinking | product? | YES/ NO | |
| , | | | | <i></i> | | | | | |
| | | | | | | | | | |
| | | | | | ······································ | | | | |

| | 2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington | | | | | | | | | | | | |
|--|---|----------------------|-----------|--------------|------------|------------------|--------------------------------|--------------|---------------------------------------|--|--|--|--|
| - · · · | | NO 41 | Boein | g Plant 2, S | Seattle/Τι | ıkwila, Was 1 | hington Date | alalan | | | | | |
| Station | | DP-41 | 1 /A 11 | | | Field Tea | m: (Initials) | 9/8/09 JR | | | | | |
| Sample: ID Field Condition | ns | 2-31-09-4 Evening | Clear | <u> D</u> | | 1 Icia Ica | in. (initialo) | - D | - | | | | |
| | | - Evening / | CIEUN | | | | | | | | | | |
| | | | | Purge li | | | | | | | | | |
| Well Diameter (in | 1.) | | | Pur | ge Metho | , , | Submersible pu Bladder Pump | ımp | | | | | |
| Well Depth (ft.) | lator (ft) | 141 | | | | | Peristaltic Pump | | | | | | |
| Initial Depth to W Depth of Water C | | | | | | - | Other:: | | | | | | |
| 3 Casing Volume | | | | | | Start Time | 2015 | | | | | | |
| 1 Casing Volume | : | | | | | End Time | 200 | | · | | | | |
| | | | | | Total Ga | Illons Purged | 40 gall | | | | | | |
| | | DTW (wells | | | | | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance | | | | |
| 2034 | 24 | | 8.55 | 0,459.56 | 41.2 | 0.70-14 | 17.91 | +425 | doz | | | | |
| 2037 | 2.6 | | 8,59 | 04554 | 33.1 | 0.11/2/1 | 17.90 | 50,0 | Clear | | | | |
| 7040 | 2.8 | | 8,58 | 0.459.2 | 26,4 | 0.10-11 | 17.89 | -52.3 | oleor | | | | |
| 2043 | 3.0 | | 8,59 | 0,4552 | 25.0 | 6.19g/L | 17.87 | -5.5.3 | Clar | | | | |
| 2046 | 3.7 | | 860 | 6.454.52 | | 6.6-14 | 1785 | -57.5 | clew | | | | |
| 2049 | 31 | | 8,61 | 6.459,682 | 19,9 | 6,16 m/s | 17.82 | -60,0 | cher | | | | |
| 708Q | 3.6 | | 8.61 | 6,45441 | 20,4 | 010-71 | 17.81 | -60,9 | ches | | | | |
| | ļ | | | | | | | | | | | | |
| | | | | | | *** | | | | | | | |
| | | - | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | <u> </u> | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| L. | | | <u> </u> | Cample | Inform | | | | | | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | altic pum | | | | er Pump / Ot | ther | | | | | |
| Analy | /sis | Time | Bottle | е Туре | Preserva | ative/Filtrati | on | Comments | | | | | |
| VOC | | 2160 | 3-90~2 | | 1401 | | | LUMB HAVE | | | | | |
| Dissolved | | 2/60 | 1 | 11-50-LHOR | HNO | HIGLOGICANON | +M | ercum | | | | | |
| Total M | | | 1 | <u> </u> | 79 | | | | | | | | |
| Chromi | | | | | | | | | | | | | |
| Total and \ | | | | | | | | | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | | ****** | · | | | | |
| SVO | Cs | 2/00 | 4-500- | LAC | NA | | Z PAHLEW | 1 + 25 | 70C2 | | | | |
| PC | 3s | | | | | | *** | // | | | | | |
| Red | ох | | | | | | | | | | | | |
| | | | | | | | <u> </u> | | | | | | |
| End Time | 9 | 2110 | 7 | | | | | | | | | | |
| | | | | Comme | nts / Exc | eptions: | | | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | | |
| Presence of | floating p | roduct? Y | ES (NO | | Presenc | e of sinking | product? | YES /(NÔ | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| Purge Information Purge Method (circle) Submersible pump Bladder Pump Partial file Depth (tr) Partial file De | tation ample: ID ield Conditions | 2-31-DP- | 43-10-1 | J-0 | | Field Tea | Date am: (Initials) | 9 18 109 - IB | |
|--|--|-----------------|------------|----------|-----------|----------------|------------------------|------------------|-----------|
| Purge Method (circle) : Submersible pump Bladder Pump President (included in the pump Bladder Pump President (included in the pump Bladder Pump President Pump Pump President Pump Pump President Pump Pump President Pump | | | | Purao I | nforma | tion | | | |
| Peristric Peri | Iall Diameter (in) | want A | | _ | | | Submersible n | ımn | |
| Start Time Callons Casing Volume Casin | • • | 4' | | 1 41 | go mono | u (011010) . | | a.uk | • |
| Start Time Sta | | | · | | | _ | | P | , |
| Casing Volume | · | | | | | | | | |
| Total Gallons Purged 4.2 sulfurs Appearance 2.124 7.6 S.51 Octus 74.7 Octus 16.6 7 12.4 C.6 12.7 C.6 C.6 12.7 C.6 | | | | | | | | · · · · · · | |
| DTW (wells Time Gallons Only) pH Cond. NTU DO Temp. ORP Appearance Appea | Casing Volume | | | | Total Ga | | - // | 1 | - |
| Time Gallons Only PH Cond. NTU DO Temp. ORP Appearance | | DTW (wells | | | ioiai ai | anona i argou | -1.C-Jul | <u> </u> | |
| 2 2 2 2 2 2 2 2 2 2 | Time Gallons | * | На | Cond. | NTU | DO | Temp. | ORP | Appearanc |
| Sample Method(s) Correle Peristaltic pump Submersible pump Bladder Pump Other | | | | | | | | | clouds |
| Sample Information | | | | | | 7 17 | | 12.7 | 6 90/1 |
| 21 2 2 2 2 2 2 2 2 2 | - All . | | | | | | | 13,2 | e Teleron |
| Sample S | | | 8.48 | 0.673-8 | 48,3 | Mark | 16.64 | 1 | elogn 1 |
| Sample S | 2136 34 | | 8A7 | 0.674.50 | 46.3 | 0.10-12 | 16.61 | 14.7 | clear |
| Sample Method(s) (circle): Peristaltic pump Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2700 340 L VOA HC/ Dissolved Metals 200 1-11 hpps 300 Hps 400 februaries 0 1 100 feb | 2139 3-6 | | 8,46 | 0679,5 | 39.7 | 0.11-11 | 16.59 | 14.5 | Clear |
| Sample Information Sample Method(s) (circle): Peristaltic pump Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2700 340 1 VOA HC Dissolved Metals 2200 111 1006 1 200 1 1 | 2142 3.8 | | 8.46 | 6.675KL | 41.0 | OIKIL | 16.56 | 15.0 | cher |
| Sample Information Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2200 340 1 VOA HCI Dissolved Metals 2200 1-11 HONE SOL HORE HOST FREED TOTAL HONE SOL HORE HOST FREED TOTAL HONE SOL HORE SO | 2145 4.0 | | 8.46 | 063-4 | 38.7 | Olyk | 16.57 | 15.3 | dev |
| Sample Information Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2200 340 1 VOA HCI Dissolved Metals 2200 1-11 HONE SOL HORE HOST FREED TOURS Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | | | | | ` | / | | | |
| Sample Information Sample Information Sample Information Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2200 340 1 VOA HCI Dissolved Metals 2200 1-11 HONE SOL HORE HOLD FREDER TOES Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | | | | | | | | | |
| Sample Information Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2200 340 1 VOA HCI Dissolved Metals 2200 1-11 HONE SOL HORE HOST FREED TOURS Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | | | | | | _ | | | |
| Sample Information Sample Information Sample Information Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2200 340 1 VOA HCI Dissolved Metals 2200 1-11 HONE SOL HORE HOLD FREDER TOES Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | • | | | | | | | | |
| Sample Information Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2200 340 1 VOA HCI Dissolved Metals 2200 1-11 HONE SOL HORE HOST FREED TOURS Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | | | | | | | | | |
| Sample Method(s) (circle): Peristaltic pump Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments VOCs 2700 340 VOA HCI Dissolved Metals 2200 I-IL HINE I SOL HINE HOLD FUELDED Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | | | | Sample | nform | nation | | | |
| VOCs Dissolved Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time Z2/O Comments / Exceptions: | Sample Method(s) (c | ircle): Perista | ıltic pump | _ | | | er Pump / O | ther | |
| VOCs Dissolved Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time Z2/O Comments / Exceptions: | Analysis | Time | Bottle | Type | Preserva | ative/Filtrati | ion | Comments | 3 |
| Dissolved Metals Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time Comments / Exceptions: | | | 1 | | T | , | | 001, | |
| Total Metals Chromium VI Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time ZZIO Comments / Exceptions: | | 1 | 1 | | ; | | | 7-140 | rrund |
| Total and WAD CN TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time Comments / Exceptions: | Total Metals | | 1 | | 7.7 37 | 3/ | | | 0 |
| TPH-Dx, TPH-Gx SVOCs PCBs Redox End Time Comments / Exceptions: | Chromium VI | | | | | | | | |
| SVOCs PCBs Redox End Time Comments / Exceptions: | Total and WAD CN | | | | | | | | |
| PCBs Redox End Time Comments / Exceptions: | TPH-Dx, TPH-Gx | | | | | | | and the second | |
| End Time Z2/O Comments / Exceptions: | | | | | | | | | |
| End Time ZZIO Comments / Exceptions: | PCBs | | | | | | | | <u> </u> |
| Comments / Exceptions: | Redox | | | | | | | | |
| Comments / Exceptions: | | P3 3 1- | 1 . | | <u> </u> | | | | |
| | End Time | 240 | | | | | | | |
| reserve of floating product: 125/140) reserve of sinking product: 120/140) | Proconce of floating a | roduct2 V | EQ (NO | Comme | | | nroduct? | VES / NIC | 2) |
| | reserve or noaurig p | ouuct: Y | |) | 1 1000110 | U OI SIIIKIIIY | product! | 120/11/0 | |

| | 2 | -31 Area | Data C | ap Gro | oundwa | ater Sar | npling F | Field Data | |
|----------------------------|-------------|--|---|-------------|------------|------------------------|--------------------|----------------------------------|------------------|
| | | | Boein | g Plant 2, | Seattle/Tu | ıkwila, Was | shington | 0//0/10 | |
| Station | | DP-50 | | | | Fiold Toa | Date (Initials) | 9/9/09 | |
| Sample: ID Field Condition | nne | Z-31-DP-5 | <u>U</u> | | | I reid rea | uri, (irindalə) | | |
| Tiela Conditio | J113 | Inside | | | | | | | |
| | | | | Purge I | nformat | tion | | | . 漢 () 《 |
| Well Diameter (ir | 1.) | 1" | | | | | Submersible p | ump | |
| Well Depth (ft.) | | 14' | | | | | Bladder Pump | | |
| Initial Depth to W | /ater (ft.) | | | | | | Peristaltic Pur | np- | |
| Depth of Water 0 | | | | | | 1 | Other: : | | - |
| 3 Casing Volume | | | | | | Start Time End Time | 1330 | | - |
| 1 Casing Volume | 9 | L | | | Total Ga | Illons Purged | 3,50411 | -5 | |
| | | | | | TOTAL CO | mons i diged | 30 9411 | - D-C-200- | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1461 | 2.2 | | 6.87 | 4,5394 | 3216 | 0,46-1/2 | 16.26 | 170.1 | Cles |
| 140E | 2,5 | | 7.00 | 4.52QL | 20,7 | 0,45,1/ | 16.18 | 165:5 | chec |
| 1410 | 2.7 | | 7.09 | 4,503-1 | 16.4 | 0.45mg/L | 16,12 | 142.2 | cles |
| 14/3 | 2.9 | *: | 7:12 | 4,498.8- | 15,0 | 6.44 JL | 11.12 | 161. | clau |
| 1416 | 3.1 | | 7,17 | 1.44.L | 15:19 | 6.44-XL | 16.08 | 159.2 | clar |
| 1419 | 3.3 | | 7.19 | 9.49a.Sh | 115 | 0.43-14 | 16.08 | 157.5 | dear |
| 1422 | 3,5 | 1 | 7.21 | 4.488.4 | 9.76 | 1 BALL | 16.08- | 156.0 | 1 4 |
| 1 600 | 1 717 | | | | | 1/ | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | - | | | | | | | | |
| | | | | | | | | | |
| <u> </u> | | • | | Sample | e Inform | nation | | | |
| Sample Meti | hod(s) (c | ircle): Perista | altic pum | • | | | er Pump / C | Other | |
| ¥L, | , , , | The state of the s | - Carrier Control of the Control of | | | | | | |
| Analy | | Time | | е Туре | Preserva | ative/Filtrati | ion | Comments | |
| VO | | 1430 | 3.4c | LIVOA | (+C) | | | | |
| Dissolved | | 1936 | 1-14PPE | 1-500-LHPIE | HNOSIF | IELD FILTERE | | + Mercun | } |
| Total M | | | | | | | | | |
| Chromi | | | | | | | | | |
| Total and ' | | | | | | | | | |
| TPH-Dx, | | | | | | | <i>B</i> * | ··· | |
| SVC | | | | | · | | ,÷ | | |
| PCI | | 1430 | 2.11 | <u> </u> | NA | | | | |
| Red | OX | - | | | | | | | |
| <u></u> | | | <u></u> | | | | | | |
| End Time | Э | 1440 | | | | | | e. | |
| | | | 1 | Comme | nts / Exc | eptions: | | 06 | * |
| Presence of | floating p | roduct? Y | ES/NO | | | e of sinking | product? | YESTINO | |
| | | | | 7 | | | | | , |
| | | | · · · · · · · · · · · · · · · · · · · | ~~~~ | | | | | · . (A.12) |
| | | | | | | | | | |
| | | ********************** | | | | | | ································ | |

| itation sample: ID field Condit | ions | DP-26 2-31-09-26- ENSIDE | | g Plant 2, | | | Date m: (Initials) | 9/9/69 JB | |
|---|------------------------------|--------------------------------|--|------------|------------|----------------|-----------------------|---------------------------------------|-----------------|
| | | | | Purge | Informa | tion | | | |
| /ell Diameter (/ell Depth (ft.) nitial Depth to v epth of Water Casing Volum Casing Volum | Water (ft.) Column nes | 14 ' | | | rge Metho | | 1720 | Q | |
| Time | Gallons | DTW (wells only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 146 | 2.0 | 1 | 9.00 | 1.615-8- | 82.3 | 10.8-11 | 2033 | -/5.8 | yella / charles |
| 1652 | 2.3 | | 8,99 | 1.619-5- | 51.9 | 0.21-1/6 | 20,41 | -1S, 3 | 16 1 10 |
| 1656 | 2.5 | | 8.99 | 1,618-5/- | 29.7 | 0,21,// | 20.38 | -170 | Violle |
| 1659 | 2,7 | | 8,99 | 1.620,-5/4 | 21-1 | 6.22/12 | 20.37 | -17.1 | 1 sellar |
| 1702 | 2.5 | | 9.01 | 1,622-& | | 0.23-10 | 26.37 | -125 | 1/2/200 |
| 1705 | 3.1 | , | 9.00 | 1.60 SL | 16.4 | O. Hark | 20,36 | -18,4 | Jelle_ |
| 1708 | 3.3 | | 9.01 | 1600 | 17.1 | 0.295/2 | 20.36 | 49.0 | yellow |
| Parala Mat | hod/o) /si | rold): Davisto | | - | e Inform | | r Dumas / Ol | | |
| Sample Met | , , , | rclé): Perista | The same of the sa | | • | • | • | | , d |
| Anal VO | - | Time | Bottle | | T | ative/Filtrati | on I | Comments | ./- |
| Dissolve | | 1-1/5 | 340_LV | | 14Cl | | | · · · · · · · · · · · · · · · · · · · | |
| Total N | | / // 5 | 1-16-4111211- | SOLH HOPE | 11NO3/FIE | CLO FILTERED | | | |
| Chrom | | | ALC: AT | | | | | | |
| Total and | | | | | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | | , ' | |
| SVC | OCs . | | | | | | | | |
| PC | Bs | | • | | | | | | |
| Red | ox | | | | | | | | |
| End Time | e | 1720 | <u> </u> | | | | | | |
| | | <i>-</i> | _ | Comme | nts / Exce | entions: | | | * |
| Presence of | floating pro | oduct? Yl | ES /NO | | | e of sinking | product? | YES NO | |
| | | | | | | | | | |

| | 2. | -31 Area | Data C | Gap Gro | oundwa | ater Sar | npling F | ield Data | . · · · · · · · · · · · · · · · · · · · | | | |
|----------------------------|--------------|-----------------|--------------|-------------------------------|---------------------------------------|--------------------------|--|-----------|--|--|--|--|
| Otatian | | N922 | Boein | g Plant 2, | Seame/10 | ıkwila, Was 1 | Date | 8/9/09 | | | | |
| Station | | 2-31-DP-Z | 2 m . Mr. 1: | . ^ | | Field Tea | m: (Initials) | JB | | | | |
| Sample: ID Field Condition | าทร | INSUE | 10 - VO = D | | | 1 1014 104 | () | 1 | · . | | | |
| Tield Condition | | Jr N-> 1862 | | | | | | | | | | |
| | | | | Purge I | | | | | | | | |
| Well Diameter (ir | 1.) | 111 | | Pur | ge Metho | | Submersible p | ump | | | | |
| Well Depth (ft.) | | 14" | | | | | Bladder Pump | | | | | |
| Initial Depth to W | | | | | | | Peristaltic Pur | ip > | | | | |
| Depth of Water 0 | | | | | | | Other: : | | T | | | |
| 3 Casing Volume | | | | Start Time 1740 End Time 1955 | | | | | | | | |
| 1 Casing Volume | 9 | | ļ. | | Total Ga | Illons Purged | 3,500 | 1/3 | | | | |
| | | | | | Total Go | alono, algoa | 1 1 7 9° E | | | | | |
| | | DTW (wells | | | | | | | _ | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance | | | |
| H15 | 2.0 | | 9.27 | 6.5/2.8/- | 81.0 | 6.15w1L | 20.51 | -2.0 | Claroly | | | |
| 1818 | 2.2 | | 9,26 | 0,510 8 | 67,3 | 0.14-14 | 20.39 | -3,6 | Clo 672 | | | |
| 1825 | 2,5 | | 9.24 | 6,50%.8/- | 60,8 | 013016 | 20.36 | -4.0 | clay of | | | |
| 1829 | 2.7 | | 9.25 | 0,508-1/2 | | 0.13-14 | 20.35 | 574 | cleu | | | |
| 1832 | 2.9 | | 9.31 | 0.508-1/2 | 1 | 6,13-14 | 20.33 | -7.1 | clen | | | |
| 1835 | 10000 | | | | | | 20,33 | -7.6 | cler | | | |
| 10.72 | + " | | 11,20 | 0.500.5-7 | 917 | 0.135/4 | , , , , | | | | | |
| _ | | | | | | | | | | | | |
| | | <u> </u> | | | | | | | | | | |
| | | | | | <u> </u> | | | | | | | |
| | | | | | | | | | | | | |
| | | | <u> </u> | | · · · · · · · · · · · · · · · · · · · | | | | | | | |
| | | | <u> </u> | | | <u> </u> | | | | | | |
| | | <u> </u> | <u> </u> | | | | <u> </u> | | | | | |
| | | | | <u> </u> | <u> </u> | | <u> </u> | | | | | |
| | | | | | e Inform | | | | | | | |
| Sample Met | hod(s) (c | ircle): Perista | altic pum | p / Subme | rsible pun | np / Bladde | er Pump / C | ther | | | | |
| A1 | | Times | Dotti | a Tuna | Procerv | ative/Filtrat | ion | Comments | 2 | | | |
| Anal | | Time | 7 | е Туре | | alive/i illial | T | Oommente | 2 | | | |
| VO | | 1845 | 3-40-L | 7 | HCI | | | | | | | |
| Dissolved | | 1895 | 1-1LHOPE) | 1-540-LHOPE | HNO3+FU | CO FIETERED | +10 | encing | | | | |
| Total N | | | | | <u> </u> | | | | AND AND A STATE OF THE STATE OF | | | |
| Chromi | | | | | 1. | 98 NA | | | | | | |
| Total and | | 1845 | 1-500-6 | . HOPS | 171V03 F F-11 | 18. NA | 1 AMu | CONT U | | | | |
| TPH-Dx, | | _ | | | | | | <u> </u> | | | | |
| SVC |)Cs | | | | | | | | | | | |
| PC | Bs | | | | | | | | | | | |
| Red | ox | | | | | | | | | | | |
| | | | | | | | | | | | | |
| End Time | 2 | 1855 | 1 | | | | | | | | | |
| Liiu -iiii | | | | | | antions: | | | | | | |
| Presence of | finating n | roduct? V | ES (NO | Comme | nts / Exc | eptions: e of sinking | a product? | YES / W | 3 | | | |
| LIESCHICE OF | neating p | TOUGOL: I | LO (110 | | | | , ,, , , , , , , , , , , , , , , , , , , | | d | | | |
| | | | | | | | | | *************************************** | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| | 2 | -31 Area | | | | rater Sa l ukwila, Wa | | ield Data | |
|-----------------------------|----------------|--|---------------------------------------|---|--|--|---|-----------|------------|
| Station | | 00-45 | | 9 1 10.11 2, | | 7 | Date | 9/2/09 | |
| Sample: ID | | 2-31-00- | 45-10 | -W-O | | Field Tea | am: (Initials) | JB | |
| Field Condition | ons | Clear (E | | | | | | | |
| | | | | Purge | Informa | tion | | | |
| Vell Diameter (ir | n.) | o 5€. | | _ | | | Submersible pu | ımp | |
| Vell Depth (ft.) | | 14' | | | | | Bladder Pump | | |
| nitial Depth to W | | | | | | | Peristaltic Pum | p) | |
| epth of Water (| | | | | | O | Other: : | | 1 |
| Casing Volume Casing Volume | | | | | | Start Time End Time | 1910 | | - |
| Casing volume | . | | l | | Total G | allons Purged | 1955 2.0501- | ~5 | |
| | | DTW (wells | | | | 3 | | | _4 |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1930 | 1.2 | | 8.88 | 6.551.5/ | 5,88 | 0.08~14 | 21.11 | -35.8 | cky |
| 1933. | 1.4 | | 8.84 | 6.552.5/_ | | 0.08-1/2 | 21.09 | -426 | clean |
| 1936 | 1.0 | | 8.83 | 0,552.SX | | 6,08-12 | 21.08 | -48,4 | Olege |
| 1939 | 1.3 | | 8-34 | 6.553mg | 2.92 | 6.08-1 | 21.05 | -525 | change |
| | - | | | | | | | | |
| | | | | | - | | | | |
| <u> </u> | - | | | | | | | | |
| | - | | | - | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | <u> </u> | | | | | | | | |
| • | | | · · · · · · · · · · · · · · · · · · · | | | | | | |
| | | | | | | | | | |
| | ' | and the second s | | Sample | e Inform | nation | | | |
| Sample Meth | nod(s) (ci | rcle) Perista | Itic pum | | | | er Pump / Ot | her | |
| Analy | /sis | Time | Bottle | : Туре | Preserv | ative/Filtrat | ion | Comments | |
| VOC | | 1945 | 3-46-6 | | 1401 | Ų. | | | |
| Dissolved | Metals | 1945 | 1-1L HDP | E/1500-41911 | 14NO5/1 | -IELD FILTIERS | , | + Mer | Cury |
| Total M | letals | ١ | | | | | | | |
| Chromit | um VI | | | | | | | | |
| Total and V | NAD CN | | | | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | | | |
| SVO | Cs | | | | | | | | |
| PCE | 3s | 1945 | 2-161 | +6- | NA | | | | |
| Redo | OX | | | | | | | | |
| F T | | | 1 | | | | | | |
| End Time | | 1955 | <u> </u> | | ~,~, | | | | |
| Presence of | floating pr | oducta Vi | ES/NO | Comme | nts / Exc | eptions: e of sinking | nroduct? | YES / NO | |
| TOGOTIOE OI | noamy pr | | -3(.110 | .} | 1 1636110 | c or alliking | product: | 120/ 110 | |
| | | | | *************************************** | | | *************************************** | | |
| | | | | | | | | | |

| | 2 | -31 Area | Data G | ap Gro | oundwa | ater Sar | npling F | ield Data | |
|---------------------------------|----------------------|--|-----------------|------------------|------------------|--|-----------------------------|--|---|
| Station | | 00 47 | Roeinő | g Plant 2, | oeame/10 | ukwila, Was 1 | nington Date | 9/9/09 | |
| Station Sample: ID | | 2-31-DP-4 | (10 11 | . Ô | | Field Tea | ım: (Initials) | JB | |
| Field Condition | ons | Clear /EU | | | | 1 1014 104 | | 1 | |
| Tiola Conain | J.,,0 | C.C.C. 7 E.C. | Chim | | | | | | |
| | | | | | nformat | | | | |
| Well Diameter (in | า.) | 14 | | Pur | ge Metho | • | Submersible po | ump | |
| Well Depth (ft.) | | 141 | | | | | Bladder Pump | and the same of th | # · · · · · · · · · · · · · · · · · · · |
| Initial Depth to W | | | | | | < | Peristaltic Pum Other: : | ıp, | |
| Depth of Water C | | | | | | Start Time | 1950 | we are a second and a second a second and a second a second and a second a second and a second a second a second a second and a second a second a second a second a second and a second a s | <u> </u> |
| 3 Casing Volume 1 Casing Volume | | | | | | End Time | 2040 | 3.1000000000000000000000000000000000000 | |
| Todaing volume | , | L | l . | | Total Ga | | 2,592/10 | | |
| | | | | | | 5 | 7 | | • |
| | | DTW (wells | | 0 4 | • 1777 I | D.O. | т | ODD | A |
| Time | Gallons | only) | pН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 2012 . | 1.7 | | 9.13 | 0.759.2 | 10.45 | 0.08~1/2 | 15.69 | -22.3 | clear |
| 2015 | 1.9 | | 9.18 | 0.759 St. | 12.2 | 0.087/2 | 15.65 | -28.0 | CKAR |
| 2018 | 2.1. | | 9.18 | 6.75 SL_ | 2,66 | 0.08 mg/L | 15.64 | -33.3 | Jegg |
| 202 | 2.3 | | 9,23 | 0:76.SL | 9.18 | 0.07m/L | 15.4 | -386 | e)en |
| | | | | | . 3 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | ļ | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | <u> </u> | | | | | | | | |
| | | | | | | | | | |
| <u> </u> | | | | | | | | | |
| | | | | | | | | | |
| | | 1 | | Comple | - Inform | | | | |
| | | | 11: | | e Inform | | v Dumn / O | thor | |
| Sample Met | nod(s) (ci | ircle): Perista | aitic pump | Subme | rsible puri | ip / bladde | ar Pump / O | uiei | |
| Analy | vsis | Time | Bottle | Туре | Preserv | ative/Filtrati | ion | Comments | |
| VO | | 2030 | 3-40~1 | 3 | . HC | <i>i</i> | | | |
| Dissolved | | 1 | | 1-500-14496 | 7 | FIELD FILTER | 0.0 | + M | urcon |
| Total M | | Z030 | 1-1-1799E1 | 11-100000111116 | 1710031 | 1 1000 1-10181 | | | 9 |
| Chromi | | - | | | | | | | |
| Total and | | | 1 | | | | | | |
| | | | | | | | | | |
| TPH-Dx, | | | | | | | | | |
| SVC | | and the same of th | - | Α | A | | | | |
| PCI | | 7030 | 2-14 | AG | NB | | | | |
| Red | ΟX | | | | | | | | |
| <u> </u> | | 1 | | | | | <u> </u> | | |
| End Time | е | Z040 | | | | | | | |
| | | | | Comme | nts / Exc | eptions: | | | |
| Presence of | floating p | roduct? Y | ES (NO |) | Presenc | e of sinking | product? | YES √ NO | 1 |
| | <u>J</u> | | | <i>g</i> f | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | ald commonts | |
| Notes: Where multip | ole visits are requi | ired to complete samp | ling, parameter | s are to be chec | ked prior to sam | pling for each visit. | . ⊏nter data under fie | eiu comments. | |

| | 2 | -31 Area | | | | | | ield Dat | a |
|-------------------------------------|--------------|---|-----------------|------------------|--------------|----------------|---------------------------------|---------------|---|
| Station | | DP ZZ | Boein | ig Plant 2, | Seattle/1 | ukwila, Wa: | shington Date | 01/20 | |
| Sample: ID | | 2-31-DP-2 | 2-10-11 | .() | | Field Tea | am: (Initials) | 9/10/09 IB | |
| Field Condition | ons | SUMM | - 70 W | | | 1 1 1010 100 | arri. (mitadie) | 10 | |
| | | | | | | 4. | | | |
| | | | 1 | Purge I | | | | | |
| Well Diameter (ii | n.) | 14 | | Pur | ge Metho | oa (circie) : | Submersible pu | ımp | |
| Well Depth (ft.) Initial Depth to V | Vater (ft.) | 17 | | | | | Bladder Pump Peristaltic Pum | n | |
| Depth of Water (| | | | | | | Other:: | | |
| 3 Casing Volume | es | | | | | Start Time | 1220 | | |
| 1 Casing Volume | е | | | | | End Time | /320 | | |
| | | | | | Total G | allons Purged | 2 gg/lon | | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1236 | .75 | | 7,51 | 0,3938 | 7A.C | 0.23~g/L | 17.89 | 101.4 | clearing |
| 1241 | 1.0 | | 753 | 0.37hadk | 425 | 0.26-16 | 17.60 | 95.7 | clear |
| 1245 | 1.1 | | 7-57 | 0.365-Sh | 29.7 | p. Zayl | 17.59 | 92.7 | chang |
| 1251 | 1.3 | | 7.77 | 6.356 SL | 22.9 | 026-1/6 | 17,46 | 88.9 | cley |
| 17256 | 1-4 | | 7.80 | 0.353_SL | 20.2 | 0.25m/L | 17.48 | 86.7 | der |
| 1300 | 1.5 | | 7.84 | 6,351.5/ | 176 | 027-16 | 17.48 | 85.7 | cley |
| 1303 | 1303 1.6 | | 7.87 | 6.35/L.S. | 17.2 | 0.28/1 | 17.44 | 851 | dew |
| 1306 | 1,8 | | 7.89 | 0.347_8_ | 16.0 | 0.28 pt | 17.46 | 81,2 | de |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | - | | | |
| | | | | | | | | | |
| | _ | | | | | | | | |
| | 1 | <u> </u> | <u> </u> | | <u> </u> | 1. | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | ltic pump | Sample Submer | | | er Pump / Ot | her | |
| Analy | /sis | Time | Bottle | Туре | Preserv | ative/Filtrati | ion | Comments | : |
| Voc | | 1315 | 3-40_L | | 40 | | | | |
| Dissolved | Metals | 1315 | | SOUL HORE | 11.50 | NO FINTERES | | + Mera | ·~ |
| Total M | letals | | 1 101 111 131 1 | <u> </u> | - 11 - JJ 12 | | | 7 001 0 | |
| Chromit | um VI | | | | - | | | | |
| Total and \ | NAD CN | | | | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | | | |
| SVO | Cs | | | | | | | | |
| PCE | 3s | | | | | | | | |
| Redo | ΟX | | | | | | | | |
| | | | | | | | | | |
| End Time | : | 1320 |] | | | | | - | |
| | | | £7\ | Commer | | | | | |
| Presence of | floating pro | oduct? YE | ES (NO |) | Presence | e of sinking | product? | YES (NO | |
| | | ······ | | | | | | | *************************************** |
| | | *************************************** | | | | | ****************** | | *************************************** |
| | | *************************************** | | | | | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington 9/10/09 Station Field Team: (Initials) TB Sample: ID 2-31-09-1 Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump 14 Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1355 3 Casing Volumes End Time 1530 1 Casing Volume 2.090/1000 Total Gallons Purged DTW (wells ORP Appearance Gallons only) рΗ Cond. NTU DO Temp. Time -32.4 9.24 1543 S 34,5 0.36-81 1734 1.0 1410 -358 9,26 0.538.SL 31.1 0, 32,911 17.27 12 1415 9.28 0,541.56 75.3 0.28-1/ = 40,2 14-19 1.3 9.29 18.9 M. 24-1/L -47.8 6.543 8 14 1422 0.23-1425 9.30 b. 543.5L 176 -519 -55.0 17.145 6.546.SL 17.4 0.44/6 1428 9.31 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Preservative/Filtration Comments Bottle Type Analysis Time **VOCs** 1445 3-40-2 VOAS 401 1-1100 /FIELD FLTERED Dissolved Metals 445 1-14-HOPE/1-STO-L HOPE Total Metals Chromium VI 1445 NA Total and WAD CN 1-SOO-L HOPE TPH-Dx, TPH-Gx NA **SVOCs** 1445 4-500-L AC **PCBs** 1445 2-16 AC Redox 1520 **End Time** Comments / Exceptions: YES (NO) Presence of sinking product? Presence of floating product? YES/NO) Water is slas producing

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date Station Field Team: (Initials) 31-10P-16-10-W-9 JA Sample: ID Field Conditions + Clear **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 19 Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1430 3 Casing Volumes End Time 1595 1 Casing Volume 3,0 90110 Total Gallons Purged DTW (wells **ORP** Time Gallons only) рΗ Cond. NTU DO Temp. Appearance 0. 275mS/~ 9.15 20g -02 1447 0.09-1K 7.0 22 9.18 6.276 Sh 18.2 -0.6 1400 17.65 Clear 9.18 0,276mg/ 18.1 1453 7.4 0.276-8-17.4 1956 9.20 2.6 459 2.8 9,22 0.777.52 18.9 Sample Information Sample Method(s) (circle): (Peristaltic pump / Submersible pump / Bladder Pump / Other Comments Bottle Type Preservative/Filtration **Analysis** Time **VOCs Dissolved Metals** HNOS PREZDENTARO ILHORE 1-801 HOPE **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** Redox **End Time** 1345 Comments / Exceptions: YES (NO YES (NO Presence of sinking product? Presence of floating product?

| | ~ | -31 Alea | | | | ukwila, Was | | icia Date | | | |
|------------------------------------|--------------------|--|--|---------------------------------------|------------------|----------------------|----------------------|---------------|------------|--|--|
| Station | | DP-18 | Doein | g i lant z, | Ocatio, 10 | Date 91/10/09 | | | | | |
| Sample: ID | | Z-31-0P-18 | 10-20-0 | | | Field Tea | m: (Initials) | I'B | | | |
| Field Condition | ns | SUMMY & CV | | | | | | | | | |
| | | <u> </u> | | Durgo | nformat | tion | | | | | |
| MAL II Diamanta dia | , | 14 | 1 | | | | Submersible p | ump | | | |
| Well Diameter (in Well Depth (ft.) | .) | 141 | _ | ı uı | ge Metro | | Bladder Pump | ипр : | | | |
| Initial Depth to W | ater (ft.) | | | | | | Peristaltic Pum | מו | | | |
| Depth of Water C | | | | | | | Other:: | <u> </u> | · | | |
| 3 Casing Volume | | 1. | | | | Start Time | 1540 | | | | |
| 1 Casing Volume | | |] | | | End Time | 1640 | | | | |
| | | ** | | | Total Ga | Illons Purged | 3.4 31 | | | | |
| | | DTW (wells | | | | | O . | | • | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance | | |
| | z, 0 | T | 8.74 | 0.760.56 | 53,1 | 0.28mg/L | 16,51 | 1.6 | clear | | |
| 1603 | 2,2 | | | 6.78 SL | 35.9 | 0.15mg/L | 16.36 | 3,7 | , | | |
| 1606 | | <u> </u> | 8,60 | | 28.6 | 0,1109/2 | 16.34 | | Clean | | |
| 1609 | 2.4 | | 8.61 | 6,25%.5/ | | | | 1.8 | 1 Clear | | |
| 1612 | 2.6 | | 8.61 | 6.258 SL | 29.4 | 0.02/4 | 16.25 | 0.3 | | | |
| 1615 | 2.8 | | 8,63 | 0.259.SL | 26.3 | 0.09-1 | | -1.4 | Crey | | |
| 1618 | 3,0 | | 8.60 | 6.258.SL | 25,4 | 0.09-1/2 | 1620 | + | Cay | | |
| 1621 | 3.2 | | 8.52 | 9. Work | . 45,4 | 0.02 K | 16.18 | -4.3 | Clervi | | |
| | | 1 | | | | - | | | | | |
| | | | ļ | | | | | | | | |
| | | | | | | | | | | | |
| | | ļ | | | | - | | | | | |
| | | | ļ | | i | _ | | | | | |
| | | <u> </u> | | | | | | | | | |
| | <u> </u> | <u> </u> | | | | | | | | | |
| | | A Particular Section S | The state of the s | Sample | | | | | | | |
| Sample Meth | iod(s) (ci | irale): Perista | altic pum | o / Submer | sible pum | np / Bladde | r Pump / O | ther | | | |
| Analy | eie | Time | Bottle | е Туре | Preserva | ative/Filtrati | on | Comments | | | |
| VOC | | 1630 | 3-40_1 | LAAS | Ha | att VOIT HE CAL | | Commone | | | |
| Dissolved | | 1430 | | | | | | t Mer | Vr. 24 A | | |
| Total M | | 1.50 | 1-140PK1 | 1500-LHME | HIVES I FIELD | FILTERED. | | 170 | | | |
| Chromit | | | 1 | | | | | | | | |
| Total and V | | | - | | | | | 2.450. | | | |
| TPH-Dx, T | | | - | | | | | | | | |
| | | + | | | | | | | | | |
| SVO: | | | | | | | | | | | |
| | | | | | | | | | | | |
| Redo | DX | | | | | | | | | | |
| | | | | · · · · · · · · · · · · · · · · · · · | <u> </u> | | | | | | |
| End Time | | 1640 | | | | | | | | | |
| | | | | Comme | nts / Exce | eptions: | | | | | |
| Presence of | floating pr | roduct? Y | ES/NO | | Presence | e of sinking | product? | YES / (NC | | | |
| | | | | | | | | / <u>†</u> | <u></u> | | |
| | | | | | | | | | | | |
| | | | | | | | | •••••• | | | |
| | | | | | | | | ••••• | | | |
| Notes: Where multiple | e visits are requi | red to complete samp | oling, parameter | s are to be check | ed prior to samp | ling for each visit. | Enter data under fie | eld comments. | | | |

| ample: ID field Condition | ons | 2-31-0P SUMB + C | -12-10 | - NAO | | Field Tea | Date m: (Initials) | 9/11/09 | |
|------------------------------|------------|--|--------------|-------------|------------------------|-----------------------|-----------------------|---|--------------|
| | | 30000 4 6 | 16.6-0 | | | | | | |
| | | | - | | nformat | | | | |
| /ell Diameter (ir | 1.) | 1" | | Pur | ge Method | | Submersible pu | ımp | |
| /ell Depth (ft.) | | 14' | | | | | Bladder Pump | | |
| nitial Depth to W | | | 1 | | | | Peristaltic Pum | <u> </u> | |
| epth of Water C | | | | | | | Other: : | | - |
| Casing Volume | | | - | | | Start Time | 0790 | | 4 |
| Casing Volume |) | | | | ~ | End Time | 8900 | | 4 |
| | | | | | Iotal Gal | llons Purged | 209911 | <u> </u> | _ |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| OX 15 | 1.4 | | 6.90 | 8.479.X | 33,1 | 04/2/4 | 15.28 | 123.6 | ales- |
| 0819 | 1,5 | | 7.06 | 8,492.5 | Z13 | 0.51m/L | 15.24 | 116,2 | Ola |
| 0822 | 1,6 | | 7,15 | 3.428-1 | 14.9 | 05014 | 15.22 | 112.4 | |
| | 1,7 | | | | 7,62 | 0.49.12 | 15.20 | 110:2 | CICA, |
| OTLS | | | 7.21 | 8.417.9 | -450 | | | 1 | chi |
| 9828 <u> </u> | 1.8 | | 7.24 | 8.409.52 | 6.97 | 0.48-1/2 | 15.20 | 108.7 | clear |
| | ļ | | <u> </u> | ļ | | | | | |
| | | | | | | | | | <u> </u> |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | 4 | | | |
| | | | | 1 | | | | | |
| | <u> </u> | <u> </u> | | Sample | Inform | ation | | | |
| Sample Meth | od(s) (ci | rcle): Perist | altic numr | _ | | | r Pumn / Ot | hor | |
| Jampie Meli | 100(3) (01 | icie). Felisii | and puring | Pr. Oubinci | Sibic puili | p / Diadac | ir umpro | | |
| Analy | /sis | Time | | Туре | Preserva | ıtive/Filtrati | on | Comments | |
| VOC | Cs | 0830 | 3-40-1 | VOA < | 1401 | | | | |
| Dissolved | Metals | 0830 | 1-144000/1 | SOLL HOPE | HNOSTE | ELD FILTIDBED | | + Merc | Jr/2_ |
| Total M | etals | | 1-1,01217 | 23 1 21 132 | | <u> </u> | | 2 . 2 . 2 . 2 . 2 . 2 . 2 . 2 . 2 . 2 . | 0 |
| Chromi | | | - | | | | | | |
| Total and \ | | 6830 | 1 - ma | : ileas | NA | | | **** | |
| TPH-Dx, | | 0000 | 1-500n | e FIVE | /// | | | | |
| | | | | | | | | | |
| | | | | ···· | | | | | |
| SVO | 3S | | | | | | | | |
| PCE | | | | | | | | | |
| | ЭX | | | | | | | | |
| PCE | ЭX | | | | <u> </u> | | | | |
| PCE | | 900 | | | I | | | | |
| PCE Redo | | 900 | | Comme | nts / Fxce | ptions | | | |
| PCE Redo End Time | | | TES (AIÓ | Comme | nts / Exce | ptions: | product? | YES NO | |
| PCE Redo | | | ES /NO | Comme | nts / Exce Presence | ptions: of sinking | product? | YES NO | |

| | 2- | -JI MICA | | | | ukwila, Was | hington | icia Date | ı | |
|--------------------|-------------|---------------------------------------|-----------------------|-------------|-----------|-----------------|-----------------|-----------------|--|--|
| Station | | 09-10 | | | | Date 9////9 | | | | |
| Sample: ID | | Z-31-DP-10 | -10-40- | <u>۵</u> | | Field Tea | m: (Initials) | SB | | |
| Field Conditio | ns | Somy + Ole | rl | | | | | | | |
| | | | | Purge I | nforma | tion | | | | |
| Well Diameter (in | .) | 117 | | _ | | | Submersible pu | ımp | | |
| Well Depth (ft.) | | 14 | | | | / | Bladder Pump | | | |
| Initial Depth to W | ater (ft.) | | 1 | | | | Peristaltic Pum | þ | | |
| Depth of Water C | | | | | | ī | Other:: | | - | |
| 3 Casing Volume | | | - | | | Start Time | 18855 1600 | Wanter Transfer | 4 | |
| 1 Casing Volume | | L | _ | | Total Go | End Time | 1.579 lien | * | - | |
| | | | | | iolai Ga | alloris i diged | 1.3 29 um | 2 | _ | |
| | | DTW (wells | i | | | | | | | |
| Time | Gallons | only) | pН | Cond. | NTU | DO | Temp. | ORP | Appearance | |
| 0914 | .6 | | 7.82 | 6.741.Sh | 42.7 | 0.270-14 | 17.67 | 719.6 | clean | |
| 0921 | , & | | 7.77 | | 436 | 6,277/2 | 17.70 | 18.2 | Cle | |
| 0924 | 9 | | 7.76 | 0.78 SL | 34,4 | 67774 | 17.73 | -17.5 | Chan | |
| 0927 | 1.0 | | 7.75 | 0.6955/ | 33.1 | 0,24/4 | 17.75 | -18.0 | clar | |
| 0936 | 1./ | | 7,73 | Q.687 Sh | 32.1 | 0.2ks/ | 17,77 | -18.4 | cker | |
| 0933 | 1,2 | | 7.76 | 0 6822 | 31,0 | 02711 | 17.7 | -194 | (k) | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | · | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | <u> </u> | | | | | | | |
| | | | 1 | | | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | | | | | |
| <u> </u> | <u> </u> | | | Sample | e Inform | nation | | | Samuel Company of the | |
| Sample Meth | nod(s) (ci | rcle): Perist | altic pumi | | | | er Pump / Of | ther | | |
| • | | | | | | | | | | |
| Analy | | Time | | е Туре | Preserv | ative/Filtrati | on | Comments | | |
| VOC | | 0940 | 3-45-L | | HC/ | | | | s to | |
| Dissolved | | 0940 | 1-140001 | 1-500-110PE | 14NO 11 | FRESH FILSREES | | + Mercu | 7 | |
| Total M | | | | | <u> </u> | | | | | |
| Chromit | | | | | | | | | | |
| Total and V | | | | | | | | | A | |
| TPH-Dx, 7 | | | | | | | | | | |
| SVO | | | | | | | | | | |
| PCBs PCBs | | | | | | | | | | |
| Redox | | | | | | | | | AM | |
| | | | | | | | | | | |
| End Time | | 1000 | | | | | | | | |
| | <u>~</u> | | | Comme | nts / Exc | eptions: | | | | |
| Presence of | floating pr | oduct? | ES NO |) | Presenc | e of sinking | product? | YES(/ NC |) | |
| | <u></u> | | Section of the second | | | | | | | |
| | | | | | | | | ***** | | |
| | | | | | | | | | | |
| | | · | | | | | | **** | | |

| 2-31 Area Data Gap Groundwater Sampling Field Data | |
|--|--|
| Boeing Plant 2, Seattle/Tukwila, Washington Station Date 9/1/74 | |
| Station Date 9/10/4 Sample: ID 2-31-09-12-40-12-0 Field Team: (Initials) 38 | |
| Field Conditions Sympa Chew | |
| Purge Information | |
| Well Diameter (in.) Purge Method (circle): Submersible pump | |
| Well Depth (ft.) Well Depth (ft.) Bladder Pump | |
| Initial Depth to Water (ft.) Peristaltic Pump | |
| Depth of Water Column Other:: | |
| 3 Casing Volumes Start Time 1020 | |
| 1 Casing Volume End Time 17 20 | |
| Total Gallons Purged 3,0 gallons | |
| DTW (wells | |
| | Appearance |
| 1043 2 8.70 22.29,8 87.3 0.15~1/2 16.22 -62.7 C.1 | loudy |
| 1047 2.2 8.65 22.312 85.5 019-1/2 16.23 -667 0 | logh, |
| 1051 2.4 8.60 22.32 & 87.5 0.13 JL 16.16 -69.6 646 | |
| 1054 2.6 8.58 22.3 & 91.4 O. Hyll 16.20 -70.9 C/6 | Line 1 |
| | |
| | |
| | |
| | |
| | · · · · · · · · · · · · · · · · · · · |
| | |
| | |
| | |
| | |
| Sample Information | |
| Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other | |
| odiffice method(s) (office). I chotatale purity / subfici sible purity / bladder i diffy / other | |
| Analysis Time Bottle Type Preservative/Filtration Comments | |
| VOCs 110 3-40-L VVA: HC/ | |
| Dissolved Metals 116 1-12 HOTE 1-500 LHAR HND FIELD FILTERS + Marc. | ung |
| Total Metals | <i>f</i> |
| Chromium VI | |
| Total and WAD CN 10 1-500-L 40PE NA | · · · · · · · · · · · · · · · · · · · |
| TPH-Dx, TPH-Gx | |
| SVOCs PCBs | |
| | |
| Redox | |
| End Time 1/20 | |
| Comments / Exceptions: | |
| Presence of floating product? YES NO Presence of sinking product? YES NO | |
| 5.1 | / |
| | SCORE OF THE SCORE |

| | 2 | -31 Area | Data C | ap Gro | oundwa | ater Sar | npling F | ield Data | |
|-------------------------------------|--------------|---|-----------|-------------|------------------------|--------------------------|---------------------------------|-----------|----------------|
| 0+-+: | | 100.30 | Boein | g Plant 2, | Seattle/10 | ıkwila, Was 1 | nington Date | 9/11/09 | |
| Station Sample: ID | | 2-31-09-10 | 10 11 0 | ~ | | Field Tea | m: (Initials) | JR | <u> </u> |
| Sample. 1D Field Conditio | ons | Sumu & Ch | | | | 1 1014 104 | (11.100.00) | | |
| Tiola Cortain | | | | | | | | | |
| | | | | Purge I | | | | - | |
| Well Diameter (ir | n.) | 1000 | | Pur | ge Metho | | Submersible pu | ımp | |
| Well Depth (ft.) | | 44' | | | | | Bladder Pump Peristaltic Pum | | |
| Initial Depth to W | | | | | | | Other:: | P | |
| Depth of Water 0 3 Casing Volume | | | | | | | 1155 | | _ |
| 1 Casing Volume | | | | | | End Time | 13/0 | | |
| | | | • | | Total Ga | Illons Purged | 3,29511- | ~~~ j | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1213 | 1.2 | | 7.55 | 0.70 3ms | 238 | 0,51014 | 21.70 | -19.7 | cloudy / yelly |
| 1216 | 1.4 | | 667. | 6.605 n.Sh. | 295 | 0-39g/L | 20.60 | -/2.0 | Cloudy forther |
| 1723 | 1.8 | | 6,53 | 0,685 JL | 694 | 0.332/2 | 70.55 | -196 | Classin |
| 1234 | 2.0 | | 6.60 | 0.685~ | 678 | 0.28 - 12 | 20,53 | -29,6 | closes lyell |
| 1237 | 2.2 | | 6.56 | 66733 | 672 | 0.26 1L | 20.4 | -22.7 | clo Kylysh |
| 1240 | 2.4 | | 6.31 | 0633L | 712 | 0,1671 | 20.39 | -14,6 | closely Lyell |
| 1243 | 2.6 | | 6.37 | 6,686,2 | 727 | 0,16-16 | 20.43 | -10.7 | de glydl |
| 1247 | 2.8 | | 6,36 | 068.8 | 701 | 0,19,16 | 20,43 | -22,4- | Cla Aflyora |
| 1250 | 3.0 | | 6.30 | 6615 NL | 680 | 0,19-16 | 20.17 | -13.7 | Chylyhy |
| | | | | | | | | | |
| | | | | | | | | | 5 |
| | | | | | | | | ļ | |
| | | | | | | | | | |
| | | | | | | | L | | |
| Sample Met | hod(s) (ç | ircle): Perista | altic pum | | e Inform rsible pum | | er Pump / O | ther | |
| Anal | vsis | Time | Bottle | е Туре | Preserva | ative/Filtrati | ion | Comments | |
| VO | | 1300 | 3-46.L | | Hel | | | | |
| Dissolved | d Metals | 1300 | T | 1-500-2 HOR | HNO. /F | ILTECED FIEL | + Hora | ^ | |
| Total M | /letals | | | | 7 | | 1 | 1 | |
| Chromi | ium VI | | | | | | | | |
| Total and | WAD CN | | | | | | | | |
| TPH-Dx, | TPH-Gx | | | | | | | | |
| SVC | | | | | | | | | |
| PC | Bs | | | | | | | | |
| Red | lox | | | | | | | | |
| | | | | | | | | | |
| End Time | е | 1310 | _ | | | | | | |
| Presence of | f floating p | roduct? Y | ES/NO | | nts / Exc Presenc | eptions: e of sinking | product? | YES / NO |) |
| | | | | | | | | | |
| | | *************************************** | | | | | | | |

| Station | | DP-08 | | | | Date 9/14/09 | | | | | |
|------------------------------|------------|---------------------|--|-------------|------------|--------------------------|----------------|----------|---------------------------------------|--|--|
| Sample: ID | | 2-31-09-08 | -10-W-O | | | Field Tea | ım: (Initials) | IB | · · · · · · · · · · · · · · · · · · · | | |
| ield Conditi | ons | Cloudy. | | | | | | | | | |
| | | | | Purge I | nforma | tion | | | | | |
| Vell Diameter (i | n.) | y ic | | Pur | ge Metho | d (circle): | Submersible pu | ımp | | | |
| Vell Depth (ft.) | | 14. | | | | _ | Bladder Pump | | | | |
| nitial Depth to V | | | Peristaltic Pump | | | | | | | | |
| epth of Water | | | Other:: Start Time 0150 | | | | | | | | |
| Casing Volum Casing Volum | | | | | | | | | - | | |
| Casing volum | C | | End Time 0895 Total Gallons Purged 3 0 0 1/2 | | | | | | | | |
| | | DTM (walls | | | | | | | | | |
| Time | Gallons | DTW (wells only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearanc | | |
| 0800 | 1.0 | | 8.85 | 0.5/8, Se | 143 | 0.13m/2 | 17.43 | -30,9 | Cloudy 1 yell | | |
| 0803 | 1.2 | | 8.84 | 0.516.5/ | 96.6 | 0127/ | 17.43 | -37.5 | do dy / yell | | |
| 0806 | 1,4 | | 8.84 | 0,513,5/2 | 38.5 | O.IZ. | 17.41 | -44.4 | cherytych | | |
| 0809 | 1.6 | | 8.85 | 6.50Z.Sl. | 33.7 | 0.12 JK | 17.41 | -49.3 | ch by Tyellon | | |
| 0812 | 1.8 | | 8,86 | 6,504ms/L | | 0.12-16 | 17.38 | -53.3 | charing | | |
| 0815 | 2.0 | | 8.87 | 0500 | | 0.12-16 | 17.37 | -564 | ckar | | |
| 0818 | 2.2 | | 8.88 | 0.498 X | 22.0 | 6112-16 | 17.36 | -586 | chen | | |
| 0821 | 2,4 | | 8,90 | 6.4% SZ | | 0.12 / | 17.37 | -60.6 | cleur | | |
| 0824 | 2.6 | | 8.91 | 0.49 Fred | F | 012-16 | 17.37 | -61.3 | cles | | |
| 0827 | 2.8 | | 8.91 | 6.473,8 | 16,3 | DIZZL | 17,39 | -62,9 | Clean | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | <u></u> | | <u> </u> | Sample | l Inform | ation | | | | | |
| Sample Met | hod(s) (ci | rcle). Perista | ltic pump | | | | er Pump / Ot | her | | | |
| Anal | ysis | Time | Bottle | Туре | Preserva | ative/Filtrati | ion | Comments | | | |
| VO | Cs | 0830 | 3-40,_ | L VOAs | HOL | | | | | | |
| Dissolve | d Metals | 0830 | 1-1LHOPE | 1-50-L HAVE | HNOZ FIE | LO FILTERED | · | + Morc. | ~~ <u>~</u> | | |
| Total N | /letals | | | | | | | | 1 | | |
| Chrom | | | | | | | | | | | |
| Total and | | | | | | | | | | | |
| TPH-Dx, | | | | | | | | | | | |
| SVC | | | | | | | | | | | |
| PC | | 0830 | 2-1L A | <u>G</u> | NA | | | | <u> </u> | | |
| Red | lox | | | | | | | | | | |
| End Tim | e | 0345 | <u> </u> | | | | | | | | |
| Presence of | | | ES (NO | Comme | nts / Exce | eptions: e of sinking | product? | YES(NC |) | | |
| | Pr | | | | | | | | | | |
| | | | | | | | | | | | |

| | 2- | 31 Area | Data G | ap Gro | oundwa | ater Sar | npling Fi | ield Data | , e d |
|---|-------------|--|---|----------------|--------------|----------------|---------------------|-----------|---------------------------------------|
| | | | Boein | g Plant 2, : | Seattle/Tu | ıkwila, Was | shington | | |
| Station | | DP-42 | | | | Ciald Tag | Date (Initials) | 9/14/09 | • |
| Sample: ID Field Condition | no. | 2-3-00 | 45pm- | 011 | | Field rea | ım: (Initials) | ET B | |
| | 115 | Cloudy | | | | | | | |
| | | | | Purge I | nformat | ion | | | |
| Well Diameter (in | .) | 16.1 | | | | | Submersible pu | mp | |
| Well Depth (ft.) | | 14' | | | | | Bladder Pump | , | |
| Initial Depth to W | | | | | | | Peristaltic-Pump | | |
| Depth of Water C | | | | | | Start Time | Other: : | |] |
| 3 Casing Volume1 Casing Volume | | | | | | End Time | 0935 | | |
| Toasing volume | | | | | Total Ga | llons Purged | 3,0 90/1 | 7 20<3 | |
| | | DTW// | | | | J , | - J | | • |
| | . | DTW (wells | | Oamal | NITTI | D.O. | T | ODD | Дипорионов |
| Time | Gallons | only) | pН | Cond. | NTU | DO To to | Temp. | ORP | Appearance |
| 0901 | 2.0 | | 8.98 | 6.448-SL | 24.2 | 0.12-12 | 17.75 | 33.9 | clew |
| 0907 | 2.2 | | 9,00 | 0.441.X | 14.7 | 0:12-je | 17./3 | 32.5 | ch |
| 0907 | 2,4 | | 9,02 | 6.478n3 | 14.5 | 012-6 | 17.76 | 32.0 | Olean |
| 09113 | 2.5 | | 9.0 | 0,94856 | 9.37 | OIZMIL | 17.76 | 31,7 | C/ea- |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| I | | | | | | | | | |
| ļ | ļ | ļ | | | | <u> </u> | | | |
| | | | | | | <u> </u> | | | , |
| | | _ | | | | ļ | | | |
| | L | | | | | | <u> L</u> | | |
| | | A STATE OF THE PARTY OF THE PAR | |). | Inform | | | | |
| Sample Meth | iod(s) (ci | rcle): Perista | ltic pump | 5 / Submer | sible pum | p / Bladde | er Pump / Ot | her | |
| Analy | sis | Time | Bottle | e Type | Preserva | ative/Filtrati | ion | Comments | |
| VOC | | 0920 | 3-40-L | | HCI | | Dants | S. ske | 0930 |
| Dissolved | | 0920 | | 11-500-21+000 | | OD FILTERE | D. 0 | 1.09 | Maria Ma |
| Total M | | 0,00 | 1.12 14V4 E | TAME COLUMN | 17/1.403 1 E | 10 +12/11/20 | T V Wea | 7 | , we way |
| Chromit | | | | | | | | | |
| Total and V | | | | | | | | | |
| TPH-Dx, 7 | | | | | | | | | |
| SVO | | | | | | | | | |
| PCE | | | | | | | | | |
| Redo | | | | | | | | · | |
| 1,000 | | | | | | | | | · · · · · · · · · · · · · · · · · · · |
| | | 130.2 | .l T | | <u></u> | | 1 | | |
| End Time | | 0935 | | | | | | | |
| | - I | | | Comme | nts / Exce | | | VEOVENIO | 1 |
| Presence of | floating pr | oduct? Y | ES /NO |) | Presence | of sinking | product? | YES(/ NO) | } |
| | | ••••• | *************************************** | | | | | , | - |
| | | *********** | | | | | | | |
| | | ****************** | | | | | | | |
| | | | | | | | ******************* | | |

| | 2 | -31 Area | | | | | | ield Data | 1 |
|--------------------|-------------|------------------|-----------|--------------|------------|---------------------------|------------------|------------------|--|
| Station | | NO 64 | Boein | g Plant 2, | Seattle/11 | ukwila, Wa: T | shington Date | 9/14/09 | |
| Sample: ID | | Z-31-DP-(| Y- 12 1 | U ~ D | | Field Tea | am: (Initials) | JR 3 | |
| Field Condition | ons | Clarety | - 1.40° | - | | | | | |
| | | | | Durgo | nforma | fion | | | |
| Well Diameter (ir | 2.1 | \$ 44 | | _ | | | Submersible po | ımn | |
| Well Depth (ft.) | 1.) | 14: | | ı uı | ge Metro | u (Giroie) . | Bladder Pump | апр | |
| Initiai Depth to W | /ater (ft.) | 3.7 | | | | | Peristaltic Pum | Ď. | |
| Depth of Water C | | | | | | | Other: : | | |
| 3 Casing Volume | | | | | | Start Time | 1040 | | |
| 1 Casing Volume | 9 | | | | Total Ga | End Time allons Purged | 1/40 20 ee/lk | | - |
| | | | | | · | inona i uigeu | 120 galle | | _1 |
| Time | Gallons | DTW (wells only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1103 | 12 | | 10.15 | 1.532 S | 59.2 | 0.19-11 | 17,03 | -37.6 | clearing |
| #07 | 1.3 | | 10.17 | 6.535 Skn | 50.8 | 0.18-12 | 16.93 | 44.8 | cleur |
| MIO | 1,4 | | 10.18 | 0.534.8/2 | 51.8 | 0.175/2 | 16.96 | -52.7 | clea |
| 1114- | 1.5 | | 10.19 | 0.532_SL | 34.1 | 6.K.JL | 16.98 | -58.1 | clear |
| 4117 | 1.6 | | 10,19 | 0.531_86 | 28.4 | 0.15-16 | 16.98 | -61,2 | C/e_ |
| 1170 | 17 | | 10.19 | 0.532.9 | 26.5 | 0.15,11 | 1494 | -65.3 | clen |
| 1153 | 1.8 | | 10.18 | 6.533sL | 27.) | 05/2 | 17.00 | -66.Z | cky |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | <u> </u> | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | Sample | Inform | ation | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | Itic pump | | | | er Pump / Ot | ther | |
| Analy | veie | Time | Rottle | : Туре | Preserva | ative/Filtrati | ion | Comments | |
| Voc | | 2/130 | 3-40-2 | | HO | 2017-011-00 | | | |
| Dissolved | | 1/30 | | 1.500.2.HORE | 3 | ELD FILTERGER | + 1 | lorum | |
| Total M | etals | | 1,107,10 | | 1131 | | | 1 | |
| Chromit | um VI | | | | | //// | | | |
| Total and V | WAD CN | | | | | | | | |
| TPH-Dx, 7 | | | | | | | | | |
| SVO | | | | | | | | | |
| PCE | | | | | - | | | | |
| Redo | OX | | | | | | | | |
| L | | | <u> </u> | | | | <u></u> | | |
| End Time | | 1120 | | | | | | | |
| D | n. e | . 1 . 10 . 3.0 | -0.00 | Comme | nts / Exce | eptions: | 1 | VEC THE | |
| Presence of | | | 87NO | , , | | of sinking | product? | YES (NO | The second secon |
| Water is pro | dusingsl | is has chai | 540×× | down to | 16 6 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| | 2- | ·31 Area I | | | | ater Sar ukwila, Was | | ieiu Dala | 1 |
|--------------------|-------------|-----------------------|-----------|--------------|-------------|--------------------------------|-----------------|-----------|--|
| Station | ſ | DP-08 | poein | y Fiaiil ∠,_ | oeame/10 | invila, vvas | Date | 9/14/09 | |
| Sample: ID | | 2-31-PP-C | 8-40-0 | -0 | | Field Tea | ım: (Initials) | JB | |
| Field Condition | ns | Cloudy | | | | | | ,i | |
| <u> </u> | | \mathcal{I} | | Puras I | nforma | tion | | W 11 | |
| Well Diameter (in | ۱ ، | j., | | _ | | | Submersible p | ump | |
| Well Depth (ft.) | -1 | 14' | | i di | 50 11101110 | _ (5.15.0) . | Bladder Pump | | |
| Initial Depth to W | ater (ft.) | 1.1. | | | | | Peristaltic Pum | ip> | |
| Depth of Water C | | | | | | | Other: : | | |
| 3 Casing Volume | | | | | | Start Time End Time | 1215 | | |
| 1 Casing Volume | | | ~ | | Total Ga | | 5-038/1w | ~ | - |
| | | D.T.N. / U | | | 70101 010 | | <u> </u> | | |
| | . | DTW (wells | | Cond | NITTI | DO | Tomp | ORP | Annogrango |
| Time | Gallons | only) | pH | Cond. | NTU | DO. | Temp. | T | Appearance |
| 1143 | 4.0 | | 10.19 | 4.587.8. | 976 | 0.08.7/2 | 17.35 | -87.9 | cleving |
| 1146 | 4.2 | ? | 10.15 | 4.5824 | 486 | 0.08-14 | 17,30 | -88.8 | C 100 Kg |
| 1149 | 4.4 | | | | 45.7 | 0.083/4 | 17.23 | -89.7 | cking |
| 1152 | 4.6 | | 10,17 | 4587-51 | ATCH . | 0.083/5 | 17165 | - 0 1:1 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | <u> </u> | | | | | | | | |
| | | and the second second | | | e Inform | | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | ltic pump | 5 / Subme | rsible pun | np / Bladde | er Pump / O | ther | |
| Analy | sis | Time | Bottle | . Type | Preserv | ative/Filtrat | ion | Comments | |
| Voc | | T | 3-40-L V | | HOL | | | | |
| Dissolved | Metals | 1200 | | 1-500-2 HAVE | | IELD FILTERS | +M. | wicas) | |
| Total M | etals | | | | 3' | | · | 0 | |
| Chromit | um VI | | | | | | | www | |
| Total and V | WAD CN | | | | ļ | | | | |
| TPH-Dx, | | | | | ļ | | | | |
| SVO | | · · | 2-1t | 4-98 | | | | | Long Control of the C |
| PCE | | 1200 | 2-14 | <u> </u> | NA | | | | |
| Redo | OX | | | | | | | | |
| | | | <u> </u> | | | | 1 | | |
| End Time | ! | 1215 | <u> </u> | | | | | | - 2 |
| | | | | Comme | nts / Exc | | | V=0 /:: | |
| Presence of | floating pr | oduct? Y | ES / (10) | | Presenc | e of sinking | product? | YES (NO |)) |
| | | ***** | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| l | 2 | -31 Area | Data C | ap Gro | oundw | ater Sai | mpling F | ield Data | |
|--|----------------|---|---|-----------------|-------------|----------------|---------------------------------|---|------------|
| | | | | | | ukwila, Was | shington | | |
| Station | | DP-09 | | 2 | <i>P</i> 3. | | Date | 9/14/09 | |
| Sample: ID Field Condition | one | Z-31-DP- | 09-41 | <u>) -W - (</u> |) | Field Tea | am: (Initials) | IB | |
| | 0113 | | | | | | | | |
| | | | | _ | nforma | | | | |
| Well Diameter (in | n.) | 1" | | Pur | ge Metho | d (circle): | Submersible po | ımp | |
| Well Depth (ft.) | Votor (#) | 14' | - | | | ····· | Bladder Pump Peristaltic Pum | Same and the same | |
| Initial Depth to V Depth of Water (| | | | | | | Other:: | | |
| 3 Casing Volume | | | | | | Start Time | 1300 | | |
| 1 Casing Volume | Э | | | | | End Time | 1415 | | 1 |
| | | | | | Total Ga | allons Purged | 4. Zgall | | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1338 | 3.0 | | 10.17 | 1.831-54 | 797 | 0.15-16 | 17.75 | -38.3 | ch dr |
| 1347 | 3.4 | | 10,13 | 1.829-52 | 812 | 0.15-12 | 17.71 | - 96.8 | chells |
| 1350 | 3.6 | | 10.12 | 1.826, S. | 733 | 0.15-11 | 17.68 | -50.0 | ch.g |
| 1353 | 38 | | 10,14 | 18292 | 730 | 0.15-7/4 | 17.43 | -51.9 | clary |
| 1356 | 4.0 | | 10,13 | 1835 SL | 715 | 0.15-1/2 | 17.59 | -527 | cl-d |
| | | | , , | | | | | | <i>J</i> |
| | | | | | | | | | |
| | - | | | | | ļ | | | |
| | _ | | | | | | | | |
| | | | | | | | | | |
| | | | | | | + | | | |
| | " | | | | | <u> </u> | | | |
| | | | | | | | | | |
| L | <u> </u> | | | Sample | Inform | ation | 1 | | |
| Sample Meth | nod(s) (ci | r¢le): Perista | altic pump | | | | er Pump / Ot | her | |
| • | , , , | - | AND THE PERSON AND ADDRESS OF THE PERSON. | | • | • | • | | |
| Analy | | Time | Bottle | | ١ ، | ative/Filtrati | on | Comments | |
| VOC | | 1400 | 3-40-1 | L VOAs | [4C] | | | .fs . | |
| Dissolved Total M | | 1400 | 1-500-2HD | PE/I-ILHOPE | HIVBITE | ELD FILTERES | | | levery |
| Chromi | | | | | | | | | |
| Total and \ | | | | | | | | | |
| TPH-Dx, | | | | | | | | | |
| SVO | | | | | | | | | |
| PCE | | | | | | | | | |
| Redo | | | | | | | . , | | |
| | * | | | | | | | | |
| End Time | 1 | 1415 | 1 | | | | | | |
| | | | | Commo | nts / Exce | entione: | | | 1 |
| Presence of | floating pr | oduct? YI | ES//NO | | | e of sinking | product? | YE\$ / NO | |
| | 9.1 | | | | | | | | |
| | | *************************************** | | | | | | | |
| | | | ••••• | | | | | | |
| | | | | | | | | | |

| | 2- | -31 Area | | | | | | ield Data | | |
|---------------------------------|---------------|------------------|-------------------------------|--|---|------------------|--------------------------|-----------|---------------------------------------|----------------|
| Ot-1: | -1 | Do = - | Boein | g Plant 2, | Seattle/Tu | ukwila, Was 1 | | . 01 1 | ., | |
| Station | 4 | DP-30 | | | | Eigld Too | Date nm: (Initials) | 9/15/09 | | |
| Sample: ID Field Condition | ne | Z-31-DP-3 | 0-10-11. | <i>-0</i> | | I Liein iéa | ini. (miniais) | JB | | نــــــن |
| | ا ار حا ار | INSIDK. | | | | | | | | |
| | | | | Purge I | | | | | | |
| Well Diameter (in | 1.) | 1" | | Pur | ge Metho | d (circle): | Submersible pu | ımp | | |
| Well Depth (ft.) | | 14' | | | | | Bladder Pump | • | e e e e e e e e e e e e e e e e e e e | 3 |
| Initial Depth to W | | | | | | < | Peristaltic Pum | 0-> | | |
| Depth of Water C | | | 110 - 1 | | | Ctart Time | Other: : | | 1 | |
| 3 Casing Volume 1 Casing Volume | | | 2 | | | Start Time | 0650 08/5 | | | |
| r Casing volume | ; | L | e | | Total Ga | Illons Purged | 7.1 | - 5 | 18th 18th 18th 18th | |
| | | | * * | | . • • • • • • • • • • • • • • • • • • • | | Jens Jens | | - | |
| Time | Gallons | DTW (wells only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance | • |
| T | 1,6 | 1 | 7,10 | 6575-51- | 83.7 | 0.19.1 | 2267 | 44,4 | closely | |
| 0719 | 1.8 | | 7.39 | 6.537-56 | 76.9 | 0,585/L | 22.72 | 10.5 | CLS | |
| 0122 | Z.0 | | 7.44 | 6,535LL | 5 Z. Z | 0.18-5/4 | 22.74 | -12.5 | classes | |
| 0726 | 2.2 | | 7.79 | 6,535,8 | 42.7 | 0.180/4 | 22.74 | -25,3 | clearth 1 yellow | :51 |
| 0729 | 2,4 | | 7.92 | 0,535,54 | 40.6 | 0,17,14 | 22.73 | -31.0 | cke | |
| 0732 | 2.6 | | 8,03 | 0.535,SL | 43.6 | 0.16.16 | 22.74 | -35.7 | clew | |
| 0732 | 8.5 | | 8.29 | 0.535_\$ | 29.9 | 0.16-2/4 | 27.77 | *43.2 | chear | |
| 0743 | 3.0 | | 8,23 | 6.536.1 | 28.4 | 0.6-14 | 22.74 | -458 | chev | and the second |
| 0746 | 3.2 | | 8.37 | 0,5 Fmg. | 27.9 | 0.Km/L | 22,76 | -46,9 | 64 | |
| 01.46 | 2.6 | | 03 / | O.S. Jorge | | 000-77 | | | | |
| | | | | | | | | | | |
| | | | | | | | | | , | |
| | 1 | | · | | | | | | | |
| | | | | | | | | | | |
| <u> </u> | <u> </u> | | | Sample | Inform | ation | | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | ltic pump | | | | er Pump / Ot | her | • | |
| · | | | article and the second second | | | ative/Filtrati | | Comments | * ₩ % | |
| Analy VO | | Time | Bottle | | F | auve/Filliali | T | Comments | | |
| Dissolved | | 0800 | 3-40-L1 | | Hel | | | 1.4. | | |
| Total M | | 0800 | 1-12HOPE/1 | -SID-LI-108E. | 14403/1-1 | ELO FILTELEC | 1 | +Mercung | | |
| Chromi | | | | | | | | | - | |
| Total and \ | | <u> </u> | | | | | | | | |
| TPH-Dx, | | | | ·· | | | | | - | |
| SVO | | | | | | | | | | |
| PCE | | NO. | - 11 11 | | a 1 a. | | | **** | | |
| | | 0800 | 2-1LAC | , | NA | | | | | |
| Red | JX | | | ************************************** | | | | | | |
| | | | l | | L | | <u> </u> | | | |
| End Time | ! | 08/5 | <u> </u> | | | | | 1. | | |
| | | | f | Comme | nts / Exc | | | | ` | |
| Presence of | floating pr | oduct? Y | ES/NO | <u>/</u> | Presence | e of sinking | product? | YES(NO | | |
| | | | | | | | | | | |
| n. | | | | | | | | | | |
| | | | ••••• | | | | | | | |
| | | | | | | | | **** | | |

| tation ample: ID | | DP-15 | 15-10-2 | 1 20 | | Field Tea | Date m: (Initials) | 1/15/09 JR | | | | |
|---------------------|-------------|----------------|------------------|------------|------------|-----------------|---|---|------------|--|--|--|
| ield Condition | ons | TUSIDE | | | | | | | | | | |
| | | | | Purge I | nforma | tion | | | | | | |
| /ell Diameter (ir | 1.) |) 4 | | _ | | | Submersible po | ımp | | | | |
| /ell Depth (ft.) | , | 191 | Bladder Pump | | | | | | | | | |
| itial Depth to W | later (ft.) | | Peristaltic Pump | | | | | | | | | |
| epth of Water C | | | Other:: | | | | | | | | | |
| Casing Volume | es | | | | | Start Time | 0905 | | | | | |
| Casing Volume |) | | | | | End Time | 0850 | | | | | |
| **. | | | | | Total Ga | allons Purged | 2.29110 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | | | |
| | | DTW (wells | | | | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU . | DO | Temp. | ORP | Appearance | | | |
| 5819 | 1,0 | , k | 9.08 | 0.805mg/L | 24.6 | 0.21-1/2 | 24.08 | -490 | clear | | | |
| 2822. | 1,2 | | 9.10 | 0.88.SL | . 19.3 | 021-14 | 24,0% | -483 | clear | | | |
| 0825 | 1,4 | | 9.11 | 0.301-5 | 11.3 | 6.26m/L | 24,08 | -51.2 | clean | | | |
| 0828 | 16 | | 9,12 | 6.798-X | 10.85 | 6.26/4 | 24.08 | -53.1 | clear | | | |
| 0831 | 1.8 | | 0.14 | 0.796-SL | 8,68 | 0.20g/L | 24,08 | -54.4 | deu | | | |
| | | i. | 1 1 1 | | | / | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| , | | ÷ | | | | | | | | | | |
| | 1 | | | | | | 1.0.0.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0 | | | | | |
| | <u> </u> | | | | | | ***** | | | | | |
| | | | | | | | | | | | | |
| 198 | | <u> </u> | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | Sample | Inform | ation | | <u> </u> | | | | |
| Sample Meth | nod(s) (ci | rcle): Perista | iltic pump | _ | | | r Pump / Of | her | | | | |
| Analy | rsis | Time | Bottle | Туре | Preserva | ative/Filtratio | on | Comments | | | | |
| VOC | | Ø846 | 3-40-0 | | 1401 | | | | | | | |
| Dissolved | | Ó%40 | | I SOLLHINE | INA / Fue | D FILTKREP | 1 100 | 1- Mercu | A | | | |
| Total M | | 1000 | 100000 | COLONIAL | 73/1/6 | # FILE F-KALK | | | 7 | | | |
| Chromit | | | <u> </u> | | | | | | | | | |
| Total and V | | | | | | | -,,- | | | | | |
| TPH-Dx, 7 | | | | | | | | | | | | |
| SVO | | | | | | | | | | | | |
| PCE | | A.VA- | -11 | Λ. | , , A | | | <u></u> | | | | |
| PCBs | | WA- | , | | | | | | | | | |
| Neuc | <u> </u> | | | | | | | | | | | |
| End Time | | 0850 | 1 . | | | | | | | | | |
| | | 7.54 | | Commer | nts / Exce | entions: | | , and all and a second | | | | |
| | floating pr | oduct? V | EŞ/NO |) | | of sinking | product? | YES NO | | | | |
| resence of | noaung pr | oduct: H | _9 / 110 | / | 1 1000110 | 2010111111119 | p.oudot. | | · 1 | | | |

| | 2 | 2-31 Area | Data C | Gap Gro | oundwa | ater Sar ukwila, Was | npling F | ield Data | à |
|--------------------------------------|--------------|---------------------|------------|-------------|-------------|-----------------------------|-----------------|-----------|-------------|
| Station | | DP. 21 | Boein | ig Plant 2, | Seame/ re | ikwiia, vvas | Date | 9/15/ | 09 |
| Sample: ID | | 2-31-0 | 0.21 | 10 - N | -0 | Field Tea | m: (Initials) | 30 | |
| Field Conditi | ons | SURRY | * | Clea | | | | * | |
| | | | | Puras I | nformat | tion | | | |
| Well Diameter (i | n \ | 540 A | 7 | | | | Submersible p | ump | |
| Well Diameter (i Well Depth (ft.) | 11. <i>)</i> | 131 | | ı uı | 90 11101110 | , | Bladder Pump | | |
| Initial Depth to V | Vater (ft.) | | | | | | Reristaltic Pun | np) | |
| Depth of Water | | | | | | | Other:: | | |
| 3 Casing Volum | | | 4 | | | Start Time End Time | 1110 | | - |
| 1 Casing Volum | е | | | | Total Ga | End Time : allons Purged | 1135 | lons | - |
| | | | | | 70101 00 | anono r argour | | 10113 | _ |
| Time | Gallons | DTW (wells only) | s pH | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1118 | .6 | T | 10.04 | 0.550 | 95.9 | 0.13=3 | 12.67 | 628 | clouda |
| 1121 | 1.7 | | 10.05 | 05482 | | 013 | 18.59 | 57.5 | clearing |
| 1124 | . 8 | | 10.10 | 4550± | 37.7 | 0.12 7 | 19.46 | 54.4 | clearing |
| 1127 | .9 | | 10.11 | ASSS= | 1.35 | 0.1220 | 18.42 | 52.6 | chan |
| 1130 | 1.0 | | 10.13 | | 21.8 | 0.12 | 18.40 | 51.0 | clear |
| 1122 | 1.1 | | 10.15 | ۵.556 2 | 21.8 | 0,110 | 18.36 | 49.7 | clear |
| 1136 | 1.2 | | 10.17 | 4.55 | 15.1 | 0.11= | 17.40 | 42.5 | - clear |
| 1139 | 1.3 | | 1019 | 0.30 | 14,2 | 0.4 = 2 | /7.39 | 47.5 | close |
| 1142 | 14 | | 10.19 | astoe | 14,2 | 0.11 | 12.41 | 46.8 | cleur |
| Sample Met | hod(s) (c | bircle). Perist | raltic pum | | e Inform | | er Pump / C | Other | |
| • | , , , | 1 | | | • | | | | |
| Anal | | Time | Bottle | e rype | | ative/Filtrati | I | Comments | J |
| VO Dissolve | | IIT3 | 1 11 1100 | LVCAS | | | | 60 1 | Maari |
| Total N | | 1175 | 1-12 HOTE | ALTERNA | TE PIN | 1317/84 | FLLTER | | Mercun |
| Chrom | | | | | | | | | |
| Total and | | | | | | | | | 20 |
| TPH-Dx, | ··· | | | | | | | | |
| SVC | | | | | | | | | |
| PC | | | | | | | | | |
| Red | lox | | | | | | | | |
| | | | | | | | | | |
| End Tim | e | 1155 | | | | | | | |
| Presence of | f floating p | product? | YES (NO | | nts / Exco | eptions: e of sinking | product? | YES /(NC |) |
| | | | | | | | | | |

| | | DP-27 | | | | ukwila, Was] | Date | 9/15/09 | |
|------------------------------------|--------------------------|---------------|--------------|--------------|------------|------------------------|-----------------|-----------|--|
| Sample: ID | | 2-31-00- | 27-10-2 | 1.0 | | Field Tea | am: (Initials) | JB | |
| Field Condition | ons | Li | SIDE | | | | | | |
| | | | | Purge I | nforma | tion | | | |
| Well Diameter (ir | ı.) | 1" | | Pur | ge Metho | d (circle): | Submersible pu | ımp | |
| Well Depth (ft.) | | 14' |] | | | | Bladder Pump | | |
| Initial Depth to W | | | _ | | | | Reristaltic Pum | þ) | |
| Depth of Water (| | | - | | | 1 | Other: : | | |
| 3 Casing Volume 1 Casing Volume | | | | | | Start Time End Time | 1015 | | - |
| r dasing volune | • | <u> </u> | J | | Total Ga | Illons Purged | | | |
| | | DTM (malle | | | | | 210 90000 | | - J |
| Time | Callana | DTW (wells | | Cond. | NITLI | DO | Tomn | ODD | Annogrange |
| Time | Gallons | only) | pH | | NTU | DO | Temp. | ORP | Appearance |
| 0930 | 1.0 | \ | 967 | OBLSC | 41.3 | 0.262/6 | 20.31 | 5.9 | class/brownish |
| 0932 | 1.1 | | 9:58 | 0.75QX | 37.9 | 6.24 JL | 50,30 | 3.5 | dearlbrough |
| 0936 | 1.2 | | 9.5% | 0.750-5/2 | 35,2 | 0.22/12 | 20.28 | 1 | clear brownish |
| 0939 | 1.3 | | 9.54 | 0,741,51 | 30.2 | 0,21-16 | 20.25 | 3.4 | clesic |
| 0012 | 1.4 | | 9,50 | 8742.SL | 26.(| 6, 21-1/2 | 20. 26 | 2.5 | cless |
| 6945 | 1.5 | | 9.50 | 0.748.5 | 219 | 0.21 | 20,23 | -0.1 | clev |
| <u> 0948</u> | 1,6 | | 9.49 | 6.748.SL | 17.6 | 0.21/2/2 | 20.23 | -0.2 | Clear |
| | | | | <u> </u> | £-8,4Z | Frank tu | bidib rea | by withou | A flow-through al |
| | | | | | | | | | M III |
| | | | | | | | | | A A A A A A A A A A A A A A A A A A A |
| | | | <u> </u> | | | | | | AND |
| | | | | | | | | | ************************************** |
| | | | | | | | | | The state of the s |
| | | <u> </u> | <u> </u> | Sample | Inform | ation | 1 | | |
| Sample Meth | nod(e) (cir | cla). Pariet | altic num | • | | | er Pump / Ot | her | |
| Sample Well | 100(3) (611 | cic). T chair | antic purit | pri Oubinei | Sible pull | ip / Diaduc | ar umprot | | |
| Analy | | Time | Bottle | е Туре | Preserva | ative/Filtrati | on | Comments | · |
| VOC | | 1000 | 3-40- | L VOA | HCI | | | | SS 44 N 1 A 2 A 1 A 1 |
| Dissolved | | 1660 | 1-11 4000 | / U-SOULHONE | 14/103/FAE | LO FILTERED | | + Merco | y |
| Total M | | | | | | | | | 18.348 |
| Chromit | | | | | | | | | A 200 A |
| Total and V | * | 1000 | 1-500,1 | HOPE | NA | i | | | 1834 |
| | ГРН-Gx | | | | | | | | |
| TPH-Dx, | | 1 | | | | | | | |
| SVO | | | | | | | | | |
| | | | | | | | | | |
| SVO | 3s | | | | | | | | 20 9 10 47 |
| SVO PCE | 3s | | | | | | | | |
| SVO PCE | Bs DX | 1015 | | | · | | | , | |
| SVO PCE Redo | Bs DX | | | Commer | nts / Exce | eptions: | | | |
| SVO PCE Redo | Bs ox | |] ES (NO) | Commer | nts / Exce | eptions: | product? | YES/NO |) |
| SVO PCE Redo End Time | 3s ox floating pro | oduct? Y | ES (NO | Commen | | | product? | YES/(NO |) |
| SVO PCE Redo End Time | 3s ox floating pro | oduct? Y | ES (NO | Commen | | | product? | YES / NO |) |

| | 2 | -ง i Area | | | | ′ater Sa ′ukwila, Wa | | ield Data | 3 |
|------------------------------------|---------------------|---|------------------|-------------------|--------------------|--------------------------------|---|-----------|---|
| Station | | DP-23 | DOGII | iy Fiani 2, | Sealle/1 | ukwiia, wa T | snington Date | 9/15/09 | |
| Sample: ID | | -90-16-5 | 7.3-10-61 | 0 | | Field Tea | am: (Initials) | JB | |
| Field Conditi | ons | | 5 Clear | | | | <u> </u> | 1 | |
| | | | | | | | | | |
| Mall Diamata /i | \ | 14 | 7 | _ | Informa | | | | |
| Well Diameter (in Well Depth (ft.) | n.) | 14' | - | Pu | rge Metho | od (circle) : | Submersible p | ump | |
| Initial Depth to V | Vater (ft.) | 14 | - | | | | Bladder Pump Peristaltic Pum | - | |
| Depth of Water (| | | | | | | Other: : | D | |
| 3 Casing Volume | | | | | | Start Time | | | 1 |
| 1 Casing Volume | € | | | | | End Time | 1240 | | 1 |
| | | | | | Total Ga | allons Purged | 2.8 aplo | .3 | |
| | | DTW (wells | ; | | | | 9 | | |
| Time | Gallons | only) | , PH | Cond. | NTU | DO | Temp. | ORP | Annogranas |
| 12.06 | 1.5 | T T | 10.18 | | | | | | Appearance |
| 1209 | 1.7 | | | 05/82 | | 0.1775 | | 14.9 | Clear |
| 1212 | T | | 10.20 | 6.518 ms | 29.2. | 0.16 25 | 18.10 | 12.3 | clea |
| 1215 | 1.9 Z,/ | | 10.20 | 0.518 | 29.7 | 0.16 25 | 18.01 | 10.0 | Clear |
| 1218 | | | 10.20 | | 19.8 | 0162 | 17.99 | 7.5 | clear |
| 12-21 | 2.3 | | 10,21 | 0.5 20 CL | 16.9 | 01/6-2 | 17.99 | 5.6 | clear |
| | 2,5 | , | 15.19 | 0.520 25 | 17.7 | 0.15 | 7.98 | 3.5 | cler |
| 1224 | 2.7 | | 10.[8 | 0.620 m2 | 15.8 | 0.18 = 5 | 18,03 | 2. 2 | Steer |
| | <u> </u> | | | | | ļ | | | |
| | | | | ļ | | | | | |
| | - | | | | | | | | ļ |
| | | | | | | | | | : |
| | | W | <u> </u> | | | | | | |
| 1 | | | ļ | | | | | | |
| | | | | <u> </u> | | L. | | | |
| 0. 1. 1. 1. | 1/ > / / | | | | Inform | | | | |
| Sample Meth | iod(s) (cir | cle):(<u>Perista</u> | altic pump | ⊳/ Submer | sible pum | p / Bladde | r Pump / Ot | her | |
| Analy | sis | Time | Bottle | Type | Preserva | tive/Filtrati | on | Comments | |
| Voc | | 1730 | 3-901 10 | | | ttivo/i ntiati | | Comments | |
| Dissolved | | 1230 | 1 | • | HC/ | | | ** | |
| Total Me | | , | C. IL HUVE IT - | 500m4/408E | HNO3/FIELD | FILTERED | - | Mercung | *************************************** |
| Chromiu | | | | | | | | <u> </u> | · · · · · · · · · · · · · · · · · · · |
| Total and W | | *** ***** | | | | | | | |
| TPH-Dx, T | | * · · · · · | | | | ***** | | | |
| SVOC | | | | | | | | | 7791 |
| PCB | | | | | *** | | | | |
| Redo | | | | | | | | | |
| | | | | | | | w | | |
| E 17: | | | 1 | | | | | | |
| End Time | L | 1240 | | | | | | | |
| Dunn 65 | | | | Commen | ts / Exce | ptions: | *************************************** | <i>p</i> | |
| Presence of f | loating pro | duct? Y | ES/NO | | Presence | of sinking | product? | YES / NO | |
| · | | | | · | · | | • | | |
| | | | | • | | | | | |
| 1 | | | | | | | | | |
| | | | *** | | | | | | |
| Notes: Where multiple | visits are required | to complete samplin | ng, parameters a | are to be checked | d prior to samplin | ng for each visit. E | nter data under field (| comments. | |

| | 2 | -31 Area | | | | rater Sa Jukwila, Wa | mpling F | ield Data | a | | | |
|-------------------------------------|---|---|--------------|-----------------|------------------------|---|---------------------------------|---------------------------------------|-------------|--|--|--|
| Station | | DP -01 | DUEII | ig Plant 2, | Seattle/ I | ukwiia, wa | Date | 9/16/09 | | | | |
| Sample: ID | | 2-31-09- | 01-6-620 | | | Field Tea | am: (Initials) | 71/6/04 IB | | | | |
| Field Condit | ions | Sunny & G | | | | | \ | | | | | |
| | *************************************** | 3 | | Duve | | 4: | | | | | | |
| | | | _ | | Informa | | | | | | | |
| Well Diameter (| in.) | 19' | _ | Pul | rge ivietno | oa (circie) : | Submersible pu | ımp | | | | |
| Well Depth (ft.) Initial Depth to \ | Mater (ft) | 19 | - | | | | Bladder Pump Peristaltic Pum | n. | | | | |
| Depth of Water | | | - | Other:: | | | | | | | | |
| 3 Casing Volum | | | | Start Time 0725 | | | | | | | | |
| 1 Casing Volum | | | End Time | | | | | | | | | |
| | | | _ | | Total Ga | | 4.0 99/18-5 | W> | | | | |
| | | DTW (well | c | | | | | | _ | | | |
| Time | Gallons | only) | рH | Cond. | NTU | DO | Temp. | ORP | Appearance | | | |
| | | T Offiny) | | | | T | 1 | · · · · · · · · · · · · · · · · · · · | | | | |
| 0749 | 2.4 | | 6.03 | 0.337 San | i | 0.16,16 | 17.77 | /253 | cloudy | | | |
| 0753 | 2.6 | | 6,46 | 0.252.56 | | 0.16-12 | 17.69 | 88.5 | alondy | | | |
| 0756 | 2.8 | | 6.65 | 0.294_8 | 1 | 0.12/2 | 17.70 | 81.4 | clearly | | | |
| 0759 | 3.0 | | 6.85 | 0.29/nS/s | 57.3 | 0.18-5/2 | 17.70 | 75.8 | clearing | | | |
| 080Z | 3.2 | | 6.98 | 0.240 ms/m | 49.4 | 0.18 13/2 | 17.65 | 68.0 | cherry | | | |
| 0805 | 3.4 | | 7.03 | 0.239 m3/cm | 48.6 | 6.18 | 17.66 | 63.1 | cleanly | | | |
| 0808 | 3.6 | | 7.06 | 0.239 -5/- | 45.9 | 0.18 ~ 1/2 | 17.63 | 58.0 | clary | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | ``` | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | 1 | | | | | | | | |
| O marala Mark | la a al/a) /a: | | | • | Inform | | D / O | | | | | |
| Sample Met | nou(s) (ci | rcie). Peris | taitic pump | by Submer | sible pun | ip / Bladde | er Pump / Ot | ner | | | | |
| Anal | ysis | Time | Bottle | е Туре | Preserva | ative/Filtrati | on . | Comments | * | | | |
| VO | Cs | 0815 | 3-40ml | | 401 | *************************************** | | | | | | |
| Dissolved | d Metals | 0815 | | /1-500_LH00E | 1 | | | ***** | ,4 | | | |
| Total M | /letals | | 114 11012 | 1 JUNE HUFE | 3 | | | | | | | |
| Chromi | | | | | | | | . , | | | | |
| Total and | | | | | | | | | | | | |
| TPH-Dx, | | 0815 | 2.000 . 4 | se/2-30 ml vo | / | .1 1 | | | | | | |
| SVC | | U\$/3 | 2.200mc 2 | 16/ Z-90 n) V9 | <i>NA /</i> ٠ | He! | | | | | | |
| PCI | | | | | - | | | | | | | |
| | | | | | | | | | | | | |
| Red | OX . | | | | | | | | | | | |
| End Time | 3 | 0825 | | | | | | | | | | |
| Presence of | floating pro | oduct? | YES (NO) | | nts / Exce Presence | eptions: e of sinking | product? | YES / OTO | | | | |
| | ····· | *************************************** | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| | 2- | 31 Area | Data G | ap Gro | oundwa | a <mark>ter Sa</mark> r kwila, Was | npling F | ield Data | |
|-------------------------------------|--------------------------------|--|--|-------------------|--|---------------------------------------|---------------------------------|-------------------|--|
| Station | ı | DP-39 | Boeing | Plant 2, | Seame/Tu | KWIIA, WAS | Date | 9/16/09 | |
| Sample: ID | | 2-31-0P-7 | SA. 10=6: | -0 | | Field Tea | ım: (Initials) | 10.0.0 | |
| Field Condition | ons | Clark | 5 (070 10 | | | | | | |
| | | | | | | • | | | |
| | , | | | _ | nformat | | | | |
| Well Diameter (ir | า.) | 1" | | Pur | ge Method | | Submersible p | ump | |
| Well Depth (ft.) | | 14' | | | | | Bladder Pump Peristaltic Pum | | |
| Initial Depth to W | | | | | | , | Other: : | ib) | |
| Depth of Water 0 3 Casing Volume | | | | | | Start Time | 0915 | | T |
| 1 Casing Volume | | | | | | End Time | 1030 | | 1 |
| Todding voiding | • | L | | | Total Gal | llons Purged | | |] |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 0922 | 4.1 | | 8.48 | 0.491 0.5 | 51.1 | 0.26 25 | 18.12 | 49.2 | clear |
| 0927 | 1.3 | | 8,57 | 0 495 25 | 35.4 | 0.26 | 17.94 | 29.6 | elen |
| 093/ | 4.5 | | 8.72 | B 49/58 | 29.5 | 0.20 75 | 17.91 | 9.9 | cleu |
| 0934 | 1.6 | | 8,76 | 0.49/25 | 21.5 | 0.247 | 17.90 | 1.2 | chen |
| 0937 | 1.7 | | 8.81 | 0.491 | 15.5 | 6.25 2 | 17.86 | -6,4 | cle |
| 094.0 | 1-8 | | 9.85 | 6,491= | 13.0 | 6.26 73 | 17.87 | -12.0 | cher |
| 0943 | 1.9 | | 8.89 | 0.491 | 12.0 | 0.26 2 | 17.82 | -15.4 | clear |
| 0946 | 2,0 | | 8.92 | 0.4912 | 9.67 | 0.2573 | 17.83 | -20.5 | clear |
| 3778 | | | 8.10 | 0.77.00 | ,,,, | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | 1 | | | | | | | | |
| | | | | | | | | | |
| Sample Met | | rcle): Perista | AND GO OF THE STATE OF THE PARTY OF THE PART | • | | | | other Comments | |
| VO | | 1600 | 3-40-L | | HCI | | | | A COLUMN TO SERVICE AND A SERV |
| Dissolved | | 1000 | | | | FIFLD FILTER | | + Mercu | . |
| Total N | | 7000 | 1-1L HUTE | 1 1-3CM | FINOS (I | - Je Do Hans | | , , , , , , | 7 |
| Chromi | | | 1 | | † | | | | |
| Total and | | 1000 | 1-500-0 | linac | NA | | | | |
| TPH-Dx, | | 1000 | | 6/2-40-LYA | | 11101 | | | |
| SVC | | | | | NA | <u> </u> | Z sin P. | | Voc |
| PC | | 1000 | 4.500 | | | | - SIM F. | 4469 <u>63</u> | |
| | | 1000 | 2-14 A | | | | | | |
| Red | OX | 1000 | see | below | | | | | |
| | 1-00-WHT. | | 1 | | L | | | | |
| End Time | e · | 1030 | | | | | | | |
| Drocence of | floating | roduct? | EC / KITA | | nts / Exce | eptions: | n product? | YES / 🛱 | * |
| rieserice of | noaung pr | roduct? Y | 10/W | | 11000110 | אוואווופ וט ב | J Product: | bil = 2/ | - m/ |
| 71 | IL HP | PE | | | Ne | ras dr | opHack | NIT DE | s m/L |
| Atha tooling | Live 10 10 2 | 01E 1-500,1 41 | | | | | | | |
| Amount in | 500-1 H | LOPIF | 11.500 | | | | | | |
| SULFIM | 5°00-L | HOPIC red to complete samp | N=66 | | | • | | | |
| Notes: Where multip | اد visits are requi کسے حکت | red to complete samp | ling, parameter | s are to be check | red prior to samp | ling for each visit. | . Enter data under fi | eld comments. | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington DP-39 Station Field Team: (Initials) Sample: ID JR 2-31-0P.39-40-W.0 Field Conditions Cloud Purge Information Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump 141 Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other::_ Depth of Water Column Start Time 1155 3 Casing Volumes End Time 135 1 Casing Volume Total Gallons Purged 2.5 gellow) DTW (wells **ORP** Appearance Cond. DO Temp. Time Gallons only) Hq NTU 0656 2 0.31.72 18.69 ~10.8 9.97 57.5 1205 1.0 0.24 = - 20.6 18.53 1208 1.2 9.97 61.5 0.22 61.5 18.47 - 79.0 1151 1.4 0.21 18.33 -35.7 68.9 9.99 1214 -91.6 1.8 67.4 6.20 = 18.Z8 1217 10.00 -46.4 18.29 1220 2.0 10.00 -50.4 67.0 0,20 1828 1223 7.2 /6 AO Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Bottle Type Preservative/Filtration Comments Analysis Time **VOCs** 1240 3.40-L VOAS 1101 Dissolved Metals 1200 WILLHORE 15001 HAVE HAVE FILTERENIN FIELD **Total Metals** Chromium VI Total and WAD CN 1240 TPH-Dx, TPH-Gx NA/HCI 1240 2.500L AG/ 2.00L10 2 5M PAH- 4 2500C. **SVOCs** 4-500-2 AG NASIB 1240 **PCBs** 2-14 AG 1240 Redox 1240 Ser below 1335 **End Time** Comments / Exceptions: YES / NO Presence of sinking product? YES / NO

NA Ferrows Jon Huch tid = 1.8 Presence of floating product? TOS IL. HOPE Ansity 16-HOPE Mitide/Nitrike/Sulfahe 1-5and HOLE NA AMONNIA SOUL HOPE HIZEOM Sulfade 500-L HOPE NaOH Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

250 L AG 42504

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date Station DP-39 Field Team: (Initials) Sample: ID 2.31-0P-39-68-W-0 Field Conditions Cloude **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 14. Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 1015 3 Casing Volumes End Time 1745 1 Casing Volume Total Gallons Purged DTW (wells Time Gallons only) рΗ Cond. NTU DO Temp. **ORP Appearance** 7.26 0.35-7 18.02 99.6 ,4 47.5 1028 15.83 0.26 = 17.92 1031 5 7.58 15.86 40.2 80.0 0.23= 6 794 33.1 17.98 18.6 1035 15.86 31.6 17.95 -6.7 .7 clear 808 0.217 1038 1587 .8 8.22 15.87 31.1 0,20-17.95 -36.6 1041 0.22 17.94 9 8.28 15.86 - 58.5 30.0 1044 15.87 27.9 1.0 8.36 0.232 -74.2 1047 12.90 15.88 27.9 0.29 2 -84.2 1050 41 8.40 17.86 -92.7 8.44 1590 27.4 0.29 2 clear 17.86 1.2 1053 Sample Information Sample Method(s) (circle): Peristaltic pump/ Submersible pump / Bladder Pump / Other Preservative/Filtration Comments Bottle Type **Analysis** Time **VOCs** 3-40-L VOA. HCI 1110 Dissolved Metals 1-16 HOME /1-500_CHOPE HANDS FIELD FILTERED + Mercury 1110 Total Metals Chromium VI Total and WAD CN 1110 1-500~L 40PE TPH-Dx, TPH-Gx NA /HOI 2-500-LAG/2-90-1 VOL MD 2 SIM PAH. & 25VOC **SVOCs** ///D 4-500-L AUA **PCBs** 2. (L AG NA 1110 Redox Son below 1110 1245 **End Time** Comments / Exceptions: YES / (NO) YES / NO Presence of sinking product? Presence of floating product? Ferrous Iran Ayah kit z4,0 IL HOPE T05 Pensity Pitrate/Mitrite 1 HOPE NA 500LL HOPE NA Water is promptly slowly 5 CONL HOPE 11,50 A Ammoria Solcide Ston HOPE Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments Toc 250 LL AG HISPA

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Station DP-44 Field Team: (Initials) -31-DP-44-10-W-0 Sample: ID Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other: : Depth of Water Column Start Time 3 Casing Volumes **Fnd Time** 1 Casing Volume Total Gallons Purged DTW (wells only) Cond. NTU DO Temp. ORP **Appearance** Ηq Time Gallons 7.06 1.416 7-44 15.55 162.4 0550 0.20 clear 1.0 dear 7.06 1,39 0.12 15.61 154.6 0553 7-06 1.20 0.10 15.62 149,4 0556 1.2 7.05 39,8 1.04 15.63 clear 0559 348 136.4 4 7,05 0.89 0.08 15.65 0602 345 0.77 15.65 134,1 0605 7 194 7,03 1341 0.71 0.08 15.63 130.6 clear 0608 6 7.03 0.08 128.8 338 0.27 0611 1.7 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Preservative/Filtration Bottle Type Comments Analysis Time 3-40 mL NOA HCI **VOCs Dissolved Metals** 0613 HLHOPE, 1-500 ML HAPPE **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs** 0613 NA Ancher Redox 0633 **End Time Comments / Exceptions:** YES I/NO Presence of sinking product? Presence of floating product?

| | 2- | -31 Area | | - | | ater Sai ukwila, Was | | ieid Data | Monthly Parameters |
|------------------------------------|------------|----------------------------|------------|-------------|---|---|--------------------------------|-----------|--------------------|
| Station | Ī | DP - 3 | | g r idin z, | Ocallio, 10 |] | Date | 9/21/0 | 4 |
| Sample: ID | | | | 19-W-C |) | Field Tea | am: (Initials) | KA | |
| Field Condition | ns | Sunn | | | | | | | |
| | | | | Durgo | nforma | lion | | | |
| AAL-II D' | , 1 | , 11 | 7 | _ | Informat | | O. haranaikla a | | |
| Well Diameter (in Well Depth (ft.) | .) | 14' | | rui | ge Metro | u (circle) . | Submersible pu Bladder Pump | ımp | |
| Initial Depth to W | ater (ft) | 14 | 1 | | | | Peristaltic Pum | n | |
| Depth of Water C | | | | | | *************************************** | Other:: | ۲ | |
| 3 Casing Volume | | | | | | Start Time | 0650 |) | |
| 1 Casing Volume | | | | | | End Time | 08/2 | | |
| - | | | - | | Total Ga | Illons Purged | 7-9 | | |
| | | DTM (wallo | | | | | - | | |
| Time | Callona | DTW (wells | | Cond. | NITLI | DO | Tomp | ORP | Annogranoo |
| Time | Gallons | only) | pH | T | NTU | | Temp. | | Appearance |
| 0708 | 1, 2 | | 6.99 | 0.604 | 86.0 | 0.13 | 13:96 | -13;8 | cloudy, gray |
| 0720 | 2.0 | | 6.98 | 0.600 | 17.0 | 0.20 | 14.02 | -23.2 | clearing |
| 0723 | 2,1 | | 6.97 | 0.601 | 13.9 | 0.19 | 14.05 | -22.9 | Clear |
| 0726 | 2-2 | | 6.97 | 0.601 | 12-0 | 0.18 | 14.11 | -27.1 | clear |
| 0729 | 2.3 | | 6.97 | 0.601 | 9.93 | 0.15 | 14.23 | -30.7 | clear |
| 0732 | 2.4 | | 6.97 | 0.602 | 11.3 | 0.15 | 14.24 | -32.2 | clear |
| 0735 | 2.5 | | 6,97 | 0.604 | 10.57 | 0.16 | 14.28 | -31.7 | clear |
| 0738 | 2.6 | | 6.97 | 0.605 | 10.73 | 0.17 | 14.32 | -32,9 | clear |
| 0741 | 2.7 | | 6.96 | 0.605 | 10.89 | 0.17 | 14,37 | -35.7 | clear |
| 0744 | 2.8 | | 6.96 | 0.605 | 10.99 | 0.17 | 14,41 | -35,7 | clear |
| 0747 | 2.9 | | 6.26 | 6.605 | 10.61 | 0.18 | 14,40 | -36.0 | dea |
| 0747 | 6-4 | | 0.10 | 0.000 | 10:01 | 0,10 | 7.770 | 50.0 | C GC AV |
| | | | <u> </u> | <u> </u> | | | | | |
| | | | | | | | | | |
| | | | 1 | | l | _ 4' | | | |
| | | | | | e Inform | | | | |
| Sample Meth | od(s) (cir | cle): ₍ Perista | altic pump | o.//Subme⊦ | rsible pum | ip / Bladde | r Pump / Ot | ner | |
| Analy | sis | Time | Bottle | Туре | Preserva | ative/Filtrati | on | Comments | |
| VOC | | 0749 | 12,40. | 11 VOAs | 401 | | Ī | Commonto | |
| Dissolved | | 0749 | | | | NO2 - field | Glered | 11 | 110 |
| Total Me | | 0717 | 1-16 HDT | E, 1-500 ml | nro H | 1003 +120 | 47/18/201 | | 0 |
| | | | | | ļ., | | | | <u> </u> |
| Chromiu | | | | | | | | | |
| Total and V | | | _ | | | | | | |
| TPH-Dx, T | | | | | | | | | |
| SVO | | | | | | | | | |
| PCB | s | | | | | | | | |
| Redo | X | | | | | 0.00 | | | |
| | | | | | | | | | |
| End Time | | 0812 | 7 | | | | | | |
| | | | | ^ | nto / Even | uliana. | | | |
| Drosonos of f | loating pr | nduct? V | ES (NO) |) Comme | nts / Exce | | nroduot? | YES /(NO | 1 |
| Presence of f | ioaing pro | Juuci! Y | ES (INO | / | riesence | of sinking | productr | 153/(110 | <i></i> |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | *************************************** | | | | |
| | | | | | | | | | |

| Station | | KA | Boein | g Plant 2, | Seattle/T | vater Sampling Field Data Tukwila, Washington Date 9/2009 | | | | | |
|------------------------------------|-------------------|---------------|--|-----------------------------------|------------------------|---|-----------------|----------|---|--|--|
| Sample: ID | | | P-13 - 10 - | W-0 | | Field Tea | am: (Initials) | KA | | | |
| Field Conditi | ons | Sunny | 80°7 | | | | | | | | |
| | | | | Purae | Informa | tion | | | | | |
| Well Diameter (i | n.) | 1 | 1 | | | | Submersible pu | ump | | | |
| Well Depth (ft.) | • | 14" | | | Ü | . , | Bladder Pump | | | | |
| Initial Depth to V | , , | | 4 | | | < | Peristaltic Pum | IP 3 | | | |
| Depth of Water | | | 4 | | | O: . T | Other:: | N | - | | |
| 3 Casing Volume 1 Casing Volume | | | - | Start Time 135.0 End Time 16.0 | | | | | | | |
| Casing volum | C | | | Total Gallons Purged 7, 4 | | | | | | | |
| | | D.T. 1 | | | 10101 01 | | 6 1 | | - | | |
| - | 0 . 11 | DTW (wells | | Oand | N ITT I | DO | Т | ODD | A | | |
| Time | Gallons | only) | pH_ | Cond. | NTU | DO | Temp. | ORP | Appearance | | |
| 1444 | 2.0 | | 7.00 | 0,514 | 11.8 | 0.32 | 19.74 | 47.0 | clear, pale Yellow | | |
| 1447 | 2.1 | | 7.00 | 0.5/5 | 10,78 | 0.05 | 19.67 | 41.1 | clear, pale Yellow | | |
| 1950 | 2,2 | | 7.00 | 0.514 | 8,32 | 50.0 | 19.72 | 40.9 | clear pale Yollow | | |
| 1453 | 2,3 | | 7.00 | 0.513 | 8,60 | 0.02 | 19,75 | 38, 2 | clear, pale yellow | | |
| 1456 | 2,4 | | 7,00 | 0,514 | 9.62 | 0.02 | 19.80 | 37,9 | clear, pale Yellow | | |
| | ļ | | | | | <u> </u> | , | | <u>'</u> | | |
| | <u> </u> | | | | | | | | | | |
| | | | - | ļ | | | | | | | |
| | | | | | | | | | | | |
| | 1 | | | | <u> </u> | | | | | | |
| | | | | | | | | ļ | | | |
| | | | | | | | | | | | |
| | | | | | | | | <u> </u> | | | |
| | | | | <u> </u> | | | <u> </u> | | | | |
| Sample Met | hod(s) (ciı | rcle): Perist | altic pump | • | e Inform rsible pum | | er Pump / Ot | ther | | | |
| Analy | vsis | Time | Bottle | : Туре | Preserva | ative/Filtrati | ion | Comments | | | |
| VO | | 1458 | 3-40 ml | | HCI | ative/i iitiati | | Oommonts | *************************************** | | |
| Dissolved | | 1458 | | 1 SOOM LAPPE | HAUZ, I | - Iland | | 1116 | | | |
| Total M | | /100 | PICTIFE, | 1300mLTPIE | 111003, 1 | THEREA | | u org | | | |
| Chromi | | | | | | | | | | | |
| Total and \ | | 1458 | 1-500 ML | HODE | NA | | | | | | |
| TPH-Dx, | | 110 | 1 Jechil | HUTE | N.O. | | | | | | |
| SVO | | 1458 | 4-50mL | NC | NA | | | | | | |
| PCE | | 1458 | 2-14 | | NA | | | | | | |
| Red | | 710 4 | | 130 | 1 | <u> </u> | d | | · | | |
| 1,00 | | | | | | , . , , | | | | | |
| End Time | ? | 1604 | | | | - <u> </u> | | | | | |
| | floating pro | oduct? | (ES /NO | Comme | nts / Exce Presence | eptions: e of sinking | product? | YES / NO |) | | |
| Presence of | | | | | | | | | | | |
| | <i>C</i> . | - 11 - 1 | 10 | | · · · · · · | * surrousem | 1. | * | N - 2-4- | | |
| | Can sn | nell exha | ust fr | on pas | sing cas | 5 / Tryin | ig to min | imize in | pact an | | |
| | Can sn Samples | nell exha | ust fr | on pass | sing cas | s /Tryiv | ig to min | imize in | spact an | | |

| Field Conditi | ons | Sunny | ~800 | 7- | | | | | |
|--|---|----------------|--|--------------|---------------|----------------|---|--------------|----------|
| | | | | Purge | Informa | tion | | | |
| Well Diameter (i | n.) | | | Pui | rge Metho | • | Submersible p | ump | |
| Well Depth (ft.) | Motor (ft) | 18' | | | | -40% | Bladder Pump | | |
| Initial Depth to V Depth of Water | | | | | | | Peristaltic Pum Other: : | p) | |
| 3 Casing Volum | | | | | | Start Time | 1402 | - | |
| 1 Casing Volum | е | | | | | End Time | 15.25 | | |
| | | | | | Total G | allons Purged | | | _ |
| ŧ | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appea |
| 7402KI | | | 7.08 | 0.375 | 43.3 | 0.03 | 19:21 | 36,2 | cloudy |
| 1410 | 0.5 | | 2.06 | 0333 | 27.2 | 0.03 | 18,91 | 42,2 | clordy |
| 1413 | 0.6 | | 7.05 | 0.323 | 22.5 | 0,03 | 18.86 | 43.5 44.3 | clearin. |
| 1419 | 0.7 | | 7.04 | 0.314 | 19,2 | 6,04 | 18,83 | 44,9 | clear |
| 1422 | 0,9 | | 7,04 | 0.324 | 16,6 | 0.03 | 18,76 | 45.6 | clear |
| 1425 | 1.0 | | 7.04 | 0,323 | 16,7 | 0.02 | 18,79 | 45,3 | clear |
| 1100 | 1 | | 1.501 | 1,7,5 | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | *************************************** | | |
| <u> </u> | | | | | | | | | |
| | | | | | | | | | |
| <u> </u> | | | | Sample | l e Inform | action | | | |
| Sample Met | hod(s) (ci | rcle): Perista | ultic numi | | | | r Pumn / Ω | ther | |
| oampic wict | , , , | | The state of the s | | , | • | · | | |
| | ysis | Time | | | | ative/Filtrati | on | Comments - | |
| Anal | _ | 1 1// 5/5 | 5-40 m | | | - 1/ 1 | | 41 | |
| . VO | | 1430 | 1 11 1100 | 2,000 | 100 | | | . Ha | |
| VO Dissolved | d Metals | 1430 | 1-12-404 | E, 1-500mLH1 | EHU03 | tiltered | | | |
| VO Dissolved Total M | d Metals Ietals | 1 | 1-12HDA | E,1-500mLH1 | E HAJO3 | tillered | | J | |
| VO Dissolved Total M Chromi | d Metals letals um VI | 1430 | | | E HAJO3 | tiltered | | J | |
| VOO Dissolved Total M Chromi Total and | d Metals detals um VI WAD CN | 1 | | E,1-500mLHL | E HAJO3 | tiltered | | J | |
| VO Dissolved Total M Chromi | d Metals Metals um VI WAD CN TPH-Gx | 1430 | 1 - 500 ₀ | nL 110PE | | tiltered | 2-51M PA | J | oCŝ |
| Dissolved Total M Chromi Total and V TPH-Dx, | Metals Metals Metals Um VI WAD CN TPH-Gx OCs | 1430 | 1-500M | | HAJO3 NA | tiltered | 2-51M PA | H, 2-5V | oCś |
| VOO Dissolved Total M Chromi Total and V TPH-Dx, SVC | d Metals Metals um VI WAD CN TPH-Gx OCs Bs | 1430 | 1-500M | nL HOPE | NA | tiltered | 2-5,M PA | J | oc's |
| VOO Dissolved Total M Chromi Total and ' TPH-Dx, SVC | d Metals Metals um VI WAD CN TPH-Gx OCs Bs | 1430 | 1-500M | nL HOPE | NA | tiltered | 2-51M PA | J | 0C's |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Station Field Team: (Initials) Sample: ID 2-31-DP-19-10-W-0 Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) 14 Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other:: Depth of Water Column Start Time 0755 3 Casing Volumes **End Time** 0907 1 Casing Volume Total Gallons Purged DTW (wells m5/m Cond. Time Gallons only) рΗ NTU DO Temp. **ORP** Appearance 0815 7.67 0.194 135 16.09 13.0 1.4 7.68 0.193 100.1 16.10 -10.8 0818 0.18 -23.0 0821 1.6 69 104.6 0,21 16.12 0824 0.25 16.13 -33.0 23,2 -44.3 2.0 72 0.192 27.5 0.18 16,12 23.3 0,24 53.6 7.2 70 16.13 2.4 17,4 0,22 16,12 -59.9 2.6 clear 73 0.191 18,1 0.23 16,13 0839 0.191 16.8 0,21 16.13 clear 2.8 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other **Bottle Type** Preservative/Filtration Comments Analysis Time 0845 HCI Duplicate **VOCs** 3-40ml MA 0845 Duplicate **Dissolved Metals** Ma 1-11 HOPE/1-500 MLHAP **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs** PCBs Redox **End Time** 0902 Comments / Exceptions: YES /NO Presence of floating product? Presence of sinking product? time: 085

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington 9/24/09 D9-02 Date Station Sample: ID Field Team: (Initials) 2-31-D7-0Z-10-W-0 TB Field Conditions cloudy **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Well Depth (ft.) Bladder Pump Initial Depth to Water (ft.) Peristaltic Pump Depth of Water Column Other:: Start Time 1105 3 Casing Volumes 1 Casing Volume **End Time** 1147 Total Gallons Purged DTW (wells only) Cond. NTU **ORP** Appearance Time Gallons рН DO Temp. 7.85 57,7 20,37 63.7 cloudy 1012 0.8 0.548 0.77 57.6 1.0 7.85 0.549 55.7 6,30 20,37 1015 cloudy 51.8 7,87 0.547 0.24 20.53 cleani 1018 1.2 36.0 1.4 7.29 0.543 2015 20.48 48,7 0.24 1071 0,25 45.9 7.90 0.540 2.70 20,53 1024 1.6 clear 8.16 0,23 zo.54 42.1 1027 1.8 7.91 0,537 clear Sample Information Sample Method(s) (circle): (Peristaltic pump// Submersible pump / Bladder Pump / Other Analysis Time **Bottle Type** Preservative/Filtration Comments 1040 **VOCs** 3-40 mL VOIA'S HCI HNOZ/SHOP **Dissolved Metals** 1040 1-12 HDPE / 1-500 ml HDPE **Total Metals** Chromium VI Total and WAD CN 1040 1-500 ML HOPE TPH-Dx. TPH-Gx 1040 2-500ml Ale/2-4Uml WOD / HCI **SVOCs** 4-500ml AC NA PAH + Z SVOCS **PCBs** Redox **End Time** Comments / Exceptions: YES// NO Presence of floating product? Presence of sinking product?

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington PP-02 Date 9/24/09 Station Z-31-DP-0Z-40-W-0 Field Team: (Initials) Sample: ID JB Field Conditions Cloudy **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) 44 Bladder Pump Well Depth (ft.) Initial Depth to Water (ft.) Peristaltic Pump Depth of Water Column Other:: 3 Casing Volumes Start Time 1220 **End Time** 1 Casing Volume 1428 Total Gallons Purged 5.8 DTW (wells Cond. NTU Gallons only) Hq DO Temp. **ORP** Appearance Time 17.59 3.4 7.73 1.196 1545 0.49 17.63 91.5 cloud 97.3 cloudy 7,71 1.194 1359 0.39 17.61 1258 3.6 93.2 cloude 0.31 17.56 1301 3.8 7,69 1017 4.3 7-68 1.189 -95.Z 1310 725 0.25 17,47 Cloudi 4.10 88 565 0.24 7,49 -96,3 Clouby 1316 7,70 -97.1 7,71 Cloude 1,187 0,23 325 5,0 17,54 -98.0 1333 5.4 7,72 1,187 157 0.24 17.86 Chudu -99. 1336 73 1.186 17,9 cloud 5.6 159 0.72 0,23 -99.9 1339 5.8 164 17.94 eloudy Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Analysis Time Bottle Type Preservative/Filtration Comments **VOCs** 1400 3-40mL VOA 401 **Dissolved Metals** 1-12 HDPE/1-500ML HDPE HUO. / Siterer **Total Metals** Chromium VI NA Total and WAD CN 1-500 mL HDPE TPH-Dx, TPH-Gx 1400 2-500 mL AG/2-40 mL WA 1HC1 4-500 mL **SVOCs** PAH+ 2 SUOCS **PCBs** Redox **End Time** 1428 **Comments / Exceptions:** YES / (NO) YES (NO Presence of floating product? Presence of sinking product?

2-31 Area Well Installation and Development Field Book Corrective Measures Study Data Gaps Investigation

Boeing Plant 2 Seattle/Tukwila, Washington Project Number 17511.1

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, Washington 98027 (425) 395-0010

Multiparameter Probe Instrument Calibration Form

| | maitipai ametei | | Strainent Gar | *************************************** | 111 | |
|---------------------------|-----------------|---------------------|---------------|--|---------------|----------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Miliporanetes | YSI | 556MPS | 088100976 | and the second s | 9/8/09 | 0740 |
| Calibrated to Autoc | | Manufacture | er Aurical | Lot Numb | er <u>735</u> | 59 ex |
| pH = <u>4,00</u> | | | | Temperature = | | _ |
| Conductivity = <u>4.4</u> | 9 Dissol | lved Oxygen | = | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: OP | 6.855 | | | | | |
| 787 | | Model | | Rental Co. | | <u> </u> |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Tubidity | LamoHe | 7070e | Me14943 | physical I P | 9/8/09 | 0752 |
| Calibrated to Autoc | al Solution | Manufacture | er | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | - |
| Conductivity = | Disso | ved Oxygen | = | Salinity = | | - |
| Turbidity Meter | 0.=0,0 | 1=1.06 | 10-9.92 | | | |
| Comments: | AMCO 1.0 1 | Lot P994 ot P897 | | · | | |
| | | Model | | Rental Co. | _ | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Calibrated to Autoc | al Solution | Manufacture | <u> </u> | Lot Numb | er | |
| pH = | | dity = | | Temperature = | · | |
| Conductivity = | | ved Oxygen | | | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| O. 121 | | | | | | |
| Calibrated to Autoc | | Manufacture | | | er | |
| pH = | | dity = | | Temperature = | | - |
| Conductivity = | Dissol | ved Oxygen | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |

Multiparameter Probe Instrument Calibration Form

| | • | | | The same of the sa | | |
|--------------------|---------------|-----------------|--------------|--|------|-------------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | = | Salinity = | | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | er | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen | | Salinity = | | - |
| Turbidity Meter | | | | | | |
| Comments: | | <u> </u> | | | | |
| | | | | | | |
| | | Model | | Rental Co. | _ | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | er | Lot Numb | oer | |
| pH = | Turb | idity = | | Temperature = | | _ |
| Conductivity = | | olved Oxygen | = | _ Salinity = | | _ |
| | | | 1 | | 1 | |
| Turbidity Meter | | | <u> </u> | | | |
| Comments: | | | | | | |
| | | | | | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| moto. Typo | | | | | | |
| Calibrated to Auto | ocal Solution | Manufactur | er | Lot Numl | ber | |
| pH = | Turb | idity = | | Temperature = | | |
| Conductivity = | Diss | olved Oxygen | = | _ Salinity = | : | |
| Turbidity Meter | | | | : | | |
| Comments: | | | | | | |

2-31 Data Gap Waste Handling Dash Card

• Boeing Project Manager: Will Ernst

• Boeing Field Engineer: Joe Flaherty, Jennifer Parsons, or Fred Wallace

• Boeing Waste Specialist: Dan Machut

Consultant: Golder and EPIContractor: Cascade Drilling

Contractor Responsibilities

- Forecast type and volume of waste to be generated prior to mobilization, communicate needs to Boeing Field Engineer to ensure proper containers are ordered.
- Call Plant 2 Materials Handling to transport containers to project area.
- Fill containers with generated waste. Once containers are full and properly labeled, place containers on pallet and band containers to prepare them for transportation to designated accumulation area.

Consultant Responsibilities

- Apply appropriate soil container identification number and labels. Initiate "Container Log".
- Collect composite sample of individual container when full or sampling effort is complete. Assign appropriate sample ID per QAPP. Complete COC including program identifier.
- Secure lid and oversee contractors place containers on pallet and band containers for transportation to building 2-120 accumulation area, or alternate location assigned by Boeing Field Engineer.
- Contact Plant 2 Materials Handling for pickup and transportation to designated accumulation area.
- Confirm pickup and transportation to designated accumulation area and verify transport within three days.
- Forward copy of completed container log to Waste Tracking Group by email.

Boeing Field Engineer Responsibilities

- Help identify types of containers needed and determine accumulation area.
- Order necessary containers from Drum Yard.
- Supply container labels and drum identification numbers.

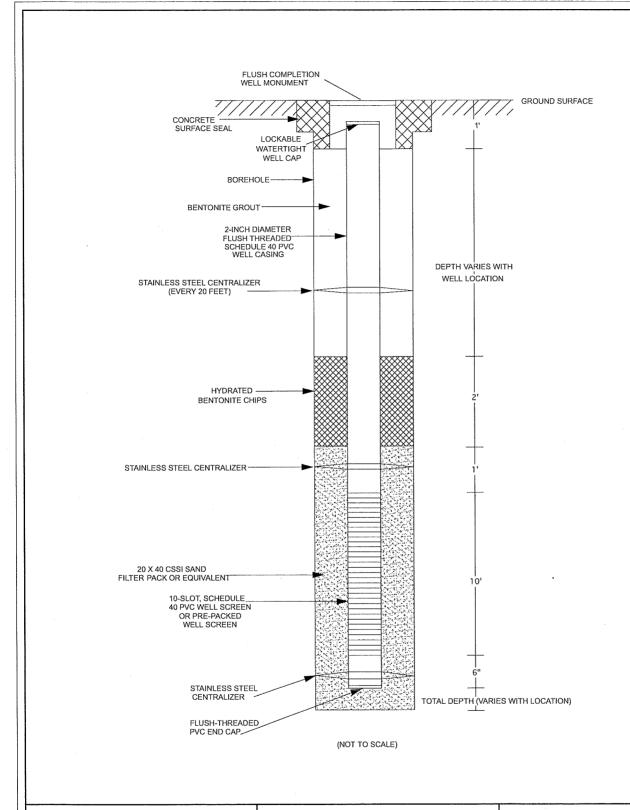
Boeing Waste Specialist Responsibilities

• Create waste characterization profile for waste containers based on composite characterization samples.

Contact List

Will Ernst: 206-655-7724 Joe Flaherty: 206-769-5987 Jennifer Parsons: 206-715-7981 Fred Wallace: 206-930-0461 Dan Machut: 206-655-8344

Plant 2 Materials Handling: 206-655-3266





295 NE Gilman Boulevard, Suite 201 Issaquab, Washington 98027

Data Gaps Investigation Work Plan 2-31 Area Boeing Plant 2 Seattle/Tukwila, Washington

Figure 3-1 Generalized Deeper Monitoring Well

| SHEET | DRAV |
|--------|------|
| 1 of 1 | Al |

WN BY RM

REVIEWED BY DCK

DATE 03/25/09 Construction Drawing



17511.

Project No.

2-31

Boring/Well Designation: ขนา-5010

Client: Boling Logged By: K.Addis

Date of Drilling: 8/24/09

Site Address: East Marginal Way South Drilling Contractor: Cascade Drilling Inc

Method: HSA Drill Rig: CMES⅁ Borehole Size: 8^廿 Site Personnel:

Kris Addis-EPI Jill Lamberts-Golden Ted Sager-Golden Jeseminh Jenkins, Cascade

Jereminh Jenkins. Cascade Andy Flagar - Cascade - Driller Kerry Lamphen - Cascade

| | | | SUBSURFACE PROFILE | | | SAMPLE | | | | | `` |
|-------|-----|--------------|---|----------|------------|-----------|--------|--------------|-------|--|------------------|
| Depth | Log | USCS Code | DESCRIPTION Name, Color: Moisture:Density; Plasticity; Dilatency:Description; Other | Interval | Recpvery % | Blows √6" | Sample | PID (ppm) | Sheen | Well Data | Comments |
| | | | Ground Surface 0-0.25 Asphalt | | | | | | | <u> </u> | Flush-Completion |
| 5 - | | 5W | | 1/4 | 777 | .3-2-3 | | | 0 | | |
| 10= | | | Loose, moist, mostly fine sand with trace still | IJ, | (// | i -3 -4 | | | | AND THE PROPERTY OF THE PROPER | |
| 15 = | | | cons with wood debris | 7/ | 7// | Z-3-6 | | | | | -z"pvc blank |
| 20 = | | SP | Poorly-Graded Sand Dark gray, moist, mostly fine Sand with brown sithy sand lens | Z | 771 | 2-2-3 | | | | TERRONAL PROCESSOR DE CONTROL DE | |
| 25 - | | 5 P | Park gray saturated, mostly from sound with red t white send grams | W | 4 | 2.2.3 | | | | A THE PROPERTY OF THE PROPERTY | |
| 30 = | | | NO Recovery-Heave | Z | /// | 50/64 He | we | | | THE CATEGORY OF THE CATEGORY O | |
| 35 | | | No Recovery- Leave | N | 2 | | | | | | 8 Heave |
| 40 = | | R | Dark gray sal mostly from sond with red thirt grains | 7/2 | 2 | 50/6 | | | | | Heave |
| 45 = | | | | ZΔ | | | | | · | DESCRIPTION OF THE PROPERTY OF | 8' Heave |



Boring/Well Designation: PL2-507C

Client: Boeing Logged By: K. Addin Date of Drilling: 8/24/09

East Murginal Way South Site Address: Drilling Contractor: Cascade Drilling, Inc

17511.

Project No.

2-31

Method: 15A

75.5

Drill Rig: CME 85 Borehole Size: 8 -

Site Personnel:

Kis Addis - EPE Jill Lamberts - Golder Ted Sager - Golden Jeremiah Jenkins - Cascade Andy Flagan - Cascade - Driller Kerry Lamphew - Cascade

| | | 5 | SUBSURFACE PROFILE | | | SAMPLE | | | | | |
|-----------------|-----|--------------|---|----------|------------|---------|--------|--------------|--|---|--|
| Depth | Log | USCS Code | DESCRIPTION Name, Color: Moisture:Density; Plasticity; Dilatency:Description; Other | Interval | Recpvery % | 1 1 | Sample | PID (ppm) | Sheen | Well Data | Comments |
| 155 | | | Ground Surface | | | | | | | d b | Centralizer |
| 45 - | | SP | Same as above | 77 | One, one | - 627 | | | | | Ma |
| 50 = | | ML | SIET Dark gray; sat ; mostly silt | | 77 | 4.5.5 | | | | | Hydroted Bendenite Chips |
| | 554 | | Dark gray; sat, mostly f-m Sand 1:58/11 Dark gray; sat, mostly silt | 1/2 | 7/ | 7 | | | | шардың ғандары жә айласынне айталықтын кере | |
| 60 - | | ML - | Dock gray; sat, mostly sitt | 1/2 | 11 | 5-10-11 | | | 67 64 65 | | EHydrated Benjonite Enips Curtralizer |
| 65 - | | 1 | Interbedded silt and fine soud sat, 1cm beds | - 1 | 1 | 18 36 ° | | | | | -2/12 Monterey Sand |
| 70 - | | SP. | Dark gray; sat, mostly fine sand with interbedded sitt lenses | | | 8-50/6" | | | 75 | | |
| <u>75 -</u> | · | C.L. | mostly silt with some clay | 7 | 12 | 75,6,7 | | <i></i> | | | |
| 80 - | | | Becomes green-gray with south the End of Borehole | .U.Z. | 17 | 11.14,2 | | | and the second s | | |
| | | 100465; | 19 81.5° | | | | | | | | e de la companya de l |
| | | · | | | | - | | | | , | |

ENVIRONMENTAL PARTNERS INC

HSA with Well Install Boring/Well Designation: PL2-507B

Client: Boeing Logged By: K. Addis

Date of Drilling: 8/25/09

East Marginal Way South Site Address: Drilling Contractor: Cascade Dailling, Inc

Method: HSA Drill Rig: CME 85 Borehole Size: 811

Project No. 175 | 1,1

2-31

Site Personnel:

Kris Addis - EPI Steve Stivers-COI Kerry Lamphew-CDF

Andy Flagan - CDI - Driller Jill Lamberts - Golder

Ted Sager-Golder

| SUBSURFACE PROFILE | | | | | SAMPLE | | | | | | |
|--------------------|-----|--------------|--|---|------------|--|--------|--------------|--|--|---|
| Depth | Log | USCS Code | DESCRIPTION Name, Color: Moisture:Density; Plasticity; Dilatency:Description; Other | Interval | Recovery % | | Sample | PID (ppm) | Sheen | Well Data | Comments |
| | | SP | Ground Surface 3" Asphalt Poorly Graded Sand | 7/2 | 77. | 7 10-11-12 | - | | | | -Flish-Mount Completion -Concrete Surface Seal |
| 5 = | | | Brick debring | 1/2 | 77 | 7/0-10-11 | | | | ął ili kiństria bisionia o zwokolastajośnia ściała wędzi Prozednostaj dyda możekia dośrobiej konczynycz | |
| 10 = | | ML | SILT Duckgryimoist, mostly silt with organic long of 10 | 77/ | 77 | 71-2-5 | | | | gen beyrmleigen met einen ette brigtet der Brogstotte SigNegeter. | · |
| 15 - | | sp.sm | Poorly Graded Sand with Silt Dork gray, Set, mostly for sand with little silt + frace gravel & brick debris | 1/1 | 7/ | 71-2-5 | | | | Anderson statement of the control of | |
| 20 = | | SP | Recry Graded Sand Dark gray, sal, mostly I in said with trace si Hatrace brick Refris Parly Graded Sand | 11/ | 77 | 3,3,3 | | | | Andrewsky Court of the Court of | -2 Blank |
| 25 <u>-</u> | | 22.5 SP | Poorly Graded Sound Dock gray, sat, mostly from sand with red a white sand grains | 771 | 77 | 3, 3, 5 | | | | Anne de la companya del la companya de la companya del la companya de la companya | Hydrated Bentonite Chips |
| 30 = | | | Henre, No Recovery | N | Ē | 4,4,5 | | | | A CONTRACTOR OF THE CONTRACTOR | |
| 35= | | | Heave, No Recovery | 74 | / AV | 50/6" | | | 35 | | -10-510+ Pre-package -screen |
| 40 = | | | Heme | 77] | N | 8,12,12 | | | The second secon | | screen |
| 45= | | | | *************************************** | | 2000-00-00-00-00-00-00-00-00-00-00-00-00 | | | 45 | | 7 |



Boring/Well Designation: PL2.507B

Client: Boeing Logged By: K. Addis

Date of Drilling: 8/25/09

East Morginel Way Site Address:

17511,1

Project No.

Drilling Contractor: Cascade Drilling . Inc

Method: HSA

Drill Rig: CME 85 Borehole Size: 8"

Site Personnel:

Kis Adds - EPI Stude Stices-CUI

Kerry Lamplew-CDI Andy Flagan-Cascade-Driller Jill Lamberts-Golden

Ted Sager - Golden

| SUBSURI | | | SUBSURFACE PROFILE | SAMPLE | | | | | | | |
|---------|-----|--------------|---|-------------------|------------|------------|--------|--------------|-------|--------------|---------------|
| Depth | Log | USCS Code | DESCRIPTION Name, Color: Moisture:Density; Plasticity; Dilatency:Description; Other | Interval | Recpvery % | Blows / 6" | Sample | PID (ppm) | Sheen | Well Data | Comments |
| | | | Ground Surface | | | | | | | 20 | |
| 45 — | | | | Interior Interior | | | | | | | Newleyey Same |
| | | | | | | | | | | | |



Boring/Well Designation:

| Client: | Site Personnel: | |
|----------------------|-----------------|--|
| Logged By: | | |
| Date of Drilling: | | |
| Site Address: | | |
| Drilling Contractor: | | |
| Method: | | |
| Drill Rig: | | |
| Borehole Size: | | |

| Borel | nole | Size: | | | | | | | | | |
|--------------------|------|--------------|---|----------|--|------------|--------|--------------|-------|--------------|----------|
| SUBSURFACE PROFILE | | | | | SAMPLI | E | | | | | |
| Depth | Log | USCS Code | DESCRIPTION Name, Color: Moisture:Density; Plasticity; Dilatency:Description; Other | Interval | Recpvery % | Blows / 6" | Sample | PID (ppm) | Sheen | Well Data | Comments |
| | | | Ground Surface | | | | | | | | |
| · I | | | | | | | ٠ | | | | |
| | | | - | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | A STAN HITELE THE ASSESSMENT PROPERTY OF THE PROPERTY TO THE | | | | | | |
| | | | | | | | | | | | |

Project No.



Boring/Well Designation:

| Site Personnel: |
|-----------------|
| |
| |
| |
| |
| |
| |
| |
| |

| Borel | nole | Size: | | | | | | | | | |
|-------|------|--------------|---|----------|------------|------------|--------|--------------|-------|--------------|----------|
| | | | SUBSURFACE PROFILE | | | SAMPLE | = | | | | |
| Depth | Log | USCS Code | DESCRIPTION Name, Color: Moisture:Density; Plasticity; Dilatency:Description; Other | Interval | Recpvery % | Blows / 6" | Sample | PID (ppm) | Sheen | Well Data | Comments |
| | | | Ground Surface | | | | | | | | |
| | | | | | | | | | | | |

Project No.

Job Name/Location:

2-31 Area Data Gaps - Boeing Plant 2

Job Number:

9/8/09

Well #:

PL2-507B

| | Visual Observations | Moddy-Bail4 Surge | Muddy-Bill+Surge | Begin Pumping - Muddy | Cloudy - Dark gray | Stop PUMPING - CLange puny | Resume pumping | Cloudy - Dark gray | Surge - Moddy | Muddy | Clearing | loudy | loudy | di . |
|--------------|------------------------------|--|------------------|-----------------------|--------------------|----------------------------|----------------|--------------------|---------------|---------------|----------|--------------|--------------|-----------------------|
| Page Number: | Temp. (oC) | 8 | 2 | 82 | \bigcirc | 5 | 2 | <u></u> | S | |) | 14.76 Cloudy | 14.77 Cloudy | 7/11/0 0 9/11/0 0 0 9 |
| | Turbidity (NTU) | | | | | | | | 754 | 7.4 | 35,4 | 23.6 | 26.9 | 0 |
| | Cond. | | | | | | | - | | | | 59h'0 | 0.460 | 4 |
| : | Hd | | | | | | | | | | | 94.5 | 5.78 | 7 |
| 3- | Volume Purged (gal.) | 00°0 20°0 | 25 | 30 | 017 | 5 | R-W | 65 | 0£ | manter of the | 85 | 2 | 001 | |
| 6/8/00 | Total Depth of Well (ft.) | No. of the second secon | | | | | | | | | | | | |
| | Depth to Water (ft.) | 16.36 | | | | | - | | | , | | | | |
| Date: | Time | 0930 | 0440 | 5001 | 6101 | 8201 | 1038 | 30 | 1048 | 1053 | 1058 | E 0 3 | 80= | ** |

8 to 9 - end

Well #:

2-31 Area Data Gaps - Boeing Plant 2

17511.1

Job Name/Location:

Job Number:

Page Number:

SION S Visual Observations Clearing 7 Clear 100 Cloudy (Lear) 700 - Par 3 200 D 187 ログタプ 14.148 ゴーかって 14.85 50 Temp. (oC) 14.87 アドラ 84 5 7 るナル 8 7 Turbidity (NTU) + 12 8 8 (S=) \$0, 1 <u>a</u> 3 7950 0.472 2970 69:0 0453 の立たり 0.20 0,957 097.0 で生る 0.458 Cond. いたい の、けの 0.80 0 88 88 のけら 0.88 5,84 12 St Hd of Well (ft.) |Purged (gal.) の場合 Her Her Volume ろ の 80 02 30 7 9 4 18/09 **Total Depth** Depth to Water (ft.) 6 907 M 38 V 10 À Time 123 82 **~** 5 Date:

dow L

7.88 J Š **を出る** 5,80

Lear

14.88

S

B

で 作 う

08)

0,50 10,50

5,78

0

9

07

Je 82

14.8.8.

Job Name/Location:

2-31 Area Data Gaps - Boeing Plant 2

17511.1

Job Number:

Well #:

PL3-507B

Page Number:

| Date: | | | | | | | Page Number: | |
|---|-------------------------|------------------------------|-------------------------|-------|----------|--------------------|--------------|---------------------|
| Time | Depth to Water (ft.) | Total Depth of Well (ft.) | Volume Purged (gal.) | Hd | Cond. | Turbidity (NTU) | Temp. (oC) | Visual Observations |
| 8121 | | | 200 | 28'5 | 0.452 | 0'72 | Eb.41 0.43 | Clear Slight odor |
| 1221 | | | 702 | 5.83 | 0,452 | 1.02 | 14.99 | Clear Slight eder |
| h221 | | | h02 | 178,5 | 1210 | h.22 | 05.7 | Clear Slight abor |
| +221 | | | 502 | 58.5 | 0.451 | 15,7 | 15.01 | Clear soms slowing |
| 1230 | | | 902 | 5,85 | 0.45 | 18.9 | 15,08 | Clear |
| 222 | | | 402 | 5,85 | 0.451 | 2.61 | 15.10 | 15.10 Cleor |
| | | | | | | | | Development |
| | | | | | | | | Comp 100) |
| 69/6/6 | <u>N</u> | 10.33 | | | | | · | |
| *************************************** | 189 0 | | | | Service. | | | |
| | | | | | | | den | |
| F. Company | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

2-31 Area Data Gaps - Boeing Plant 2 Job Name/Location:

Well #:

17511.1

Job Number:

| ļГ | | | T | | T | I | | |
|--------------|------------------------------|--|---|--|---|---|--|---|
| <u>.</u> | Visual Observations | | | | | | | |
| Page Number: | Temp. (oC) | | | | | | | |
| | Turbidity (NTU) | | | | | | | |
| | Cond. | | | | | | | |
| | Hd | | | | | | | |
| | Volume Purged (gal.) | | | | | | | |
| | Total Depth of Well (ft.) | | | | | | | |
| | Depth to Water (ft.) | | | | | | | |
| Date: | Time | | | | , | | | 7 |

Job Name/Location:

Job Number:

Date:

17511.1

2-31 Area Data Gaps - Boeing Plant 2

Well #:

PL3-507C

Page Number:

| Time | Depth to Water (ft.) | Total Depth of Well (ft.) | Volume Purged (gal.) | Hd | Cond. | Turbidity (NTU) | Temp. (oC) | Visual Observations |
|--|-------------------------|------------------------------|--|------|------------|--------------------|------------|---------------------|
| 1034 | | 92.0 | .0 | | | | | Start FUMP Surge |
| 040 | | | Ñ | · | | | | Moder |
| 10 | | | 30 | | | | | Clearing |
| 20 | | | 38 | | | | | Muddy-Surae |
| 1052 | | | - company | | | | | Surge-Middy |
| 1058 | | | 50 | | | | | Modely |
| | | | 09) | | | | | Cloudy |
| 0 | | | 52 | | | | | Cloudy |
| ************************************** | | | 8 | | - | | - | Cloudy |
| 2 | | | ن ق | £6'5 | 13,50 | 991 | 14.05 | Surge. Muddy |
| 72 | | | 501 | 50.9 | 13.56 | 80.8 | 7 7 | Cleaning |
| 18.3 | | | | 5.95 | 5.95 13.45 | F-02 | 20,4 13,99 | Clear |
| | | | | | · S | | | <i>f</i> . |
| 0 | | *** | general services and services are services and services are services a | | P | | | |

Well PLJ-507C has a dog leg at 6 bgs. Bailer does not tit;

Well #:

2-31 Area Data Gaps - Boeing Plant 2

17511.1

Job Name/Location:

Job Number:

PLA.504C

to men

| Date: | | | | ` | | - | Page Number: | | |
|-------|-------------------------|------------------------------|-------------------------|-------|-------|--------------------|------------------|------------------------------|------------------|
| Time | Depth to Water (ft.) | Total Depth of Well (ft.) | Volume Purged (gal.) | Hd | Cond. | Turbidity (NTU) | Temp. (oC) | Visual Observations | |
| 1233 | | | 022 | P.7.3 | 13.61 | £0.5 | 09.HI | 14.60 Clear, Bubbly. Do | Souter Souter |
| 1238 | | | 230 | 0119 | 95'51 | 3,57 | 13,95 | Clear, Bushly | |
| 2h21 | | | 0h2 | 6.13 | 15.75 | 6.09 | 13.97 | 13.97 Clear, Bubbly | |
| 1248 | | | 092 | 51.9 | 13,77 | 371 | 13.95 | 13.95 Clear Bubbly | |
| 1253 | | | 078 | 51.9 | 13,76 | 4,27 | 13,95 | 13,95 Clear, Bubbly | |
| 1258 | | | 0±7 | 91.9 | 13,76 | 2.98 | 13.97 | 13.97 Clear, Bubbly | |
| 1303 | | | 5+2 | 510 | 13.73 | 2.91 | 15.97 | Clear, Bubbly | |
| 1308 | | | 582 | 71.9 | 13.74 | 18.2 | 13.98 | 13.98 Clear, Bubbly | |
| 1313 | | | 395 | 0 0 | 13,74 | 2,90 | 13.98 | Clear, Bubbly | |
| 1318 | | | 305 | 79 | 15,73 | 3,72 | 13,98 | Clear, Bubbly | |
| 1323 | | · | 315 | 71.0 | 13.73 | 5,87 | 5.84 13,98 Clear | Clear, Bubbly | |
| 1328 | | | 528 | 6-13 | 13:77 | 29'h | 13.97 | 13.97 Clear Bubbly | |
| 1533 | | | 335 | 6.13 | 15.77 | 2.80 | 13.98 | 13.77 2.80 13.98 Clear Bubly | |

DE08-876

Well #:

Page Number:

2-31 Area Data Gaps - Boeing Plant 2 Job Name/Location:

Job Number:

Date:

17511.1

| | | nia. | p) | | | | | | Г |
|---|-------------------------|------------------------------|-------------------------|--------------|-------|--------------------|------------|---------------------|--------------------|
| i | Depth to Water (ft.) | Total Depth of Well (ft.) | Volume Purged (gal.) | Hd | Cond. | Turbidity (NTU) | Temp. (oC) | Visual Observations | - T |
| 1 | | | 345 | 50 | 13,77 | 2,42 | 13.98 | Cleon, Bubby | T |
| 1 | | | 350 | 2 3 | 13,79 | 517 | 13,96 | 13.96 Clear, Bubbly | |
| 1 | | | 365 | 2109 | 15.80 | 2.59 | 13,96 | Clear Bubly | T |
| | | | 375 | dissistance. | 13,80 | 13.80 3.48 | 13.96 | Clear Bubbly | Т |
| | | | 345 | - | 13.81 | 3,65 | 13.96 | 13.96 Clear Bubbly | 1 |
| | | | 395 | 0 9 | 13.56 | 3.56 4,54 | 13.96 | Clear less bubbles | \$ \(\frac{2}{5}\) |
| | | | 40% | 00.0 | 15,88 | 85 h | 13.95 | Clear | Т |
| | | | 500 | 00 | 15,86 | 7 | 96'51 | Clear | |
| | | | | | | | | Pevel or many | — Т |
| | | | | | | | | Complete, | T |
| | 20.05 | | | | | | , Schan | | |
| | | | | | | | | AAA | ĺ |
| | | | | | | | | | |
| | | | | | | | | | l |

売

2-31 Area Well Sampling Field Book Corrective Measures Study Data Gaps Investigation

Boeing Plant 2 Seattle/Tukwila, Washington Project Number 17511.1

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, Washington 98027 (425) 395-0010

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time | | | | | |
|--|----------------|------------------------|-------------------|------------------------|----------------|------|--|--|--|--|--|
| Multipolismates | Haciba | じーマレメロ | 405 3001 | /~ A | 10/1/09 | C740 | | | | | |
| Calibrated to Autoc | cal Solution | Manufacture | er <u>Aurical</u> | Lot Numb | per <u>721</u> | 8 | | | | | |
| pH = 4.00 =4.00 | Turbi | idity = <u> ಶಿ.೦</u> ಾ | D, U | Temperature = | | _ | | | | | |
| Conductivity = 4445/m = 4485/ Dissolved Oxygen = 9.54 mg/L Salinity = MA | | | | | | | | | | | |
| Turbidity Meter | | | | | | | | | | | |
| Comments: Level T | Two Solution L | -87 6990- | -UZO Ex, | p. 3/31/20, | FO | | | | | | |
| Comments: Level Two Solution Lot 6990-UZO Exp. 3/31/2010 PH= 6.860=6.87 Turb=40NTV=36NTU CONO 53 mS/cm= 53.9~8/c- | | | | | | | | | | | |
| Model Rental Co. | | | | | | | | | | | |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--------------------|--------------|-----------------|--------------|------------------------|---|------|
| Turbidity | Lamotte | 2020e | ME-14943 | Name or " | 10/1/09 | 0750 |
| Calibrated to Auto | cal Solution | Manufacture | er | Lot Numb | oer | - |
| pH = | Turb | oidity = | | Temperature = | W-11-2-11-2-11-11-11-11-11-11-11-11-11-11 | _ |
| Conductivity = | Disso | olved Oxygen | = | _ Salinity = | : | _ |
| Turbidity Meter | 6= 0,02 | 10:9.89 | 100=99.5 | | | |
| Comments: | | | | | | |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|---|--------------|---------------------|--------------|------------------------|---------|------|
| Multiparameter | YST | 556 MPS | 06B1ZZOAA | 001933 | 10/2/09 | 906 |
| Calibrated to AutoopH = 4-9-8 Conductivity = 4-9-8 | Turb | Manufacture idity = | | Temperature = | | |
| Turbidity Meter Comments: | | | | | | |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|---------------------|--------------|-----------------|--------------|--|---------|------|
| Turbidity | Cample | 2020 c | ME 14943 | ************************************** | 10/2/09 | 0750 |
| Calibrated to Autoc | cal Solution | Manufacture | er | Lot Numb | per | |
| pH = | Turb | idity = | | Temperature = | | _ |
| Conductivity = | Disso | olved Oxygen | = | Salinity = | | - |
| Turbidity Meter | 0=0.01 | 10= 9.76 | 100 = 98,7 | | | |
| Comments: | | | | | | |

| | Multiparameter | | | | | |
|---|---|---|---|---|--|----------------------------------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Moltipumeter | YSI | 556 MPS | 06A12Z0AA | 001833 | 10/5/09 | 0730 |
| Calibrated to Autoc | al Solution | Manufacture | r Aurical | Lot Numb | er <u>7269</u> | * |
| pH = $\frac{4.49.5/c_n}{4.6}$ = $\frac{4.5}{4.6}$ Conductivity = $\frac{4.49.5}{4.6}$ | Turbic | dity = <u>// // // // // // // // // // // // //</u> | | Temperature = | 9.16 00 | |
| Conductivity = $\frac{449}{}$ | Se-4 Dissol | ved Oxygen = | = 0.0.12:0.04 | /b Salinity = | | |
| Turbidity Meter | | | | | | |
| Comments: pH 7.60 | 26.98 LOT Z90 | 06508 OAK | TOV 2186 | US OFF STAN | 0ARD278 N 2 | : 227.5 |
| pH 10.00 | -9.97 LOT 2 | 90 555.70, | akton ZERO O | 2 LOT | 281251 | 5 |
| | | Model | | Rental Co. | D-4- | |
| Meter Type | Manufacturer | | Mfg. Serial# | | Date | Time |
| Tubidity Meter | La Motto | 2020e | SPINE #143 | NA | 10/5/09 | 0745 |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | oer | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen | | Salinity = | | • |
| Turbidity Meter | 0.0=0.0 | 10=132 | 10.0=9.87 | | | |
| Comments: AMCO 10.0 | | | | | | |
| | NTU LOT PIGASTS | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Multiparender | YSIL | 552 MPS | 06A12204A | 601833 | 10/6/09 | 0645 |
| Calibrated to Autoc | | Manufacture | er Actocal | Lot Numl | ber <u>72.</u> | <u> </u> |
| pH = 4.0 = 3.95 | Turbi | idity = ${\stackrel{{\cal N}}{\sim}}^{{\cal A}}$ | | Temperature = | 9,25 | |
| | | | | • | | - |
| Conductivity = 44 | Jun= 1,4 9 La Disso | | | | :_NA | - |
| | Jan= 1,4 9 La Disso | | | | | - - T |
| Turbidity Meter | | olved Oxygen | = 0.0-7/ | Salinity = | :_NA | _ |
| Turbidity Meter | 0-696 LOT 2 | olved Oxygen | = 0.0 7 L | Salinity = | : NA 225~V=23 | 26 LOT 1907276 |
| Turbidity Meter | | Policed Oxygen | = 0.0 7 L | Salinity = | : NA 225~V=23 | 26 LST 1907276 |
| Turbidity Meter Comments: pH 7.0 | 0-696 LOT 2 | olved Oxygen | = 0.0 m/L 700 ZOBELL 2 ZOBELL 2 ZOBELL | Salinity = | : NA 225~V=23 | 26 LST 1907276 |
| Turbidity Meter | 0 = 6.96 LOT Z 00 = 9.96 LOT Z96 Manufacturer | Polyson Cakes SSS & CAKE | = 0.0 ml 700 ZOBELL 2 ZOBELL Mfg. Serial# | Salinity = | : NA 225~V=Q3 LOT 28125 | - 1907276 15 Time |
| Turbidity Meter Comments: pH 7.0 pH 10. Meter Type | 0 = 6.96 LOT 2: 00 = 9.96 LOT 2:00 Manufacturer Le MoHe, | Model Number | = 0.0 m/L TON ZOBELL TON ZOBELL TON ZOBELL Mfg. Serial# | Salinity = | Date | Time |
| Turbidity Meter Comments: pH 7.0 pH 10. Meter Type | Manufacturer La Malle, cal Solution | Model Number | = 0.0 ml 208 ELL 200 02 Mfg. Serial# SN-ME 14943 er | Salinity = | NA 225 ~ V = Q3 LoT 281 25 Date)0/6/09 ber | 1907276 1907276 15 Time |
| Turbidity Meter Comments: pH 7.0 pH 10. Meter Type Tybiding to Calibrated to Autor | Manufacturer La Malle, cal Solution Turb | Model Number 2020g. Manufactur | = 0.0 m Z cro 02 Mfg. Serial# SN-ME 14943 er | Salinity = | NA 225 ~ V = Q3 LoT 281 25 Date)0/6/09 ber | Time |
| Turbidity Meter Comments: pH 7.0 PH 10. Meter Type Turbidity Meter Conductivity = Turbidity Meter | Manufacturer La Matte, cal Solution Turb Disso | Model Number 2020e Manufactur idity = | = 0.0 m ZOBELL ZOBELL ZOBELL SV. ME 14943 er = 10.0 = 9.84 | Salinity = Salinity = Solve Selve Concentration Rental Co. Serial # NA Lot Num Temperature = Salinity = | Date Dold Date | Time |
| Turbidity Meter Comments: pH 7.0 PH 10. Meter Type Turbidity Meter Conductivity = Turbidity Meter Comments: AMCO | Manufacturer La Matte, cal Solution Turb Disso | Model Number 2020e. Manufactur idity = plyed Oxygen | = 0.0 ml 70 ZOBELL 2 ZOBELL 2 ZOBELL Mfg. Serial# SN-ME 19943 er = 10.0 = 9.84 AMCO 1 | Salinity = Salinity = Solve Selve Concentration Rental Co. Serial # NA Lot Num Temperature = Salinity = | Date Dold Date | Time |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|--|-------------------|-----------------------------|---------------------|----------------------------------|------------|------|
| Multiparenelle | HORIBA | U-ZZXD | T0052002 | 00/876 | 10/7/09 | 0730 |
| Calibrated to Autoc | | Manufacture | er Avrical | Lot Numb | | |
| pH = 4.00-4.02 | Turbi | dity = NA | | | | |
| pH = $4.004.02$ Conductivity = 44 | % = .448 /- Disso | lved Oxygen | = <u>0.0,</u> 12=0. | 13-14 Salinity = | NA | |
| Turbidity Meter | | | | | | |
| Comments: | | | حر. | , use LaMoHe | | |
| Comments: Lew Two Soluth | LG+ # 6566-1 | UZC PH6.86 | =6.82 40NTU=3 | 2.7 53.0 mS/cm | , = 52.9ms | 16- |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Torbidineter | LaMotte | 2670c | SN. He 14943 | NA | 10/7/09 | 0745 |
| Calibrated to Autoc | al Solution | Manufactur | er | Lot Numb | oer | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen | = | Salinity = | | - |
| Turbidity Meter | 0.0 = 0.6 | 1.0=0.97 | 10,0=0.05 | · | | |
| Comments: AMCO | 10.0 NTU LOT P89 | 11234 | AMCO GOA | 1TU PP 96176 | | |
| AMCO | 1.0 NTU LOT PO | 194875 | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufactur | er | Lot Num | per | |
| pH = | Turb | idity = | | Temperature = | • | |
| Conductivity = | | olved Oxygen | | | | |
| | | | | | | |
| | | i i | 1 | | | |
| Turbidity Meter | | | | | | |
| Turbidity Meter Comments: | | | | | | |
| | - Anguir | | | | | |
| | | Model | | Rental Co. | | T |
| | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Comments: | Manufacturer | l . | Mfg. Serial# | 1 ' ' | Date | Time |
| Comments: | | l . | | 1 ' ' | | · |
| Comments: Meter Type | cal Solution | Number | er | Serial # | ber | |
| Meter Type Calibrated to Auto | cal Solution | Number Manufactur | er | Serial # Lot Num Temperature = | ber | |
| Meter Type Calibrated to AutoopH = | cal Solution | Number Manufactur idity = | er | Serial # Lot Num Temperature = | ber | |

| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
|---------------------------|---------------|--------------------------|--------------|------------------------|----------|----------|
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | • | |
| Turbidity Meter | | | | | · | |
| Comments: | | | · | | | |
| | | | | | | · |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | r | Lot Numb | er | |
| pH = | Turbi | idity = | | Temperature = | | _ |
| Conductivity = | Disso | lved Oxygen : | = | Salinity = | | - |
| | | | | | | |
| Turbidity Meter | | | | <u> </u> | | |
| Comments: | | | | | | |
| | | | | - B / I A | | — |
| Motor Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Wallulacturer | Itamsor | inigi ocitam | | | 11110 |
| | | | | | | |
| Calibrated to Auto | ocal Solution | Manufacture | er | Lot Numb | oer | |
| pH = | Turb | idity = | | Temperature = | | _ |
| Conductivity = | Disso | olved Oxygen | | _ Salinity = | | _ |
| Turkidite Mater | | | | | | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | Karalal | | Rental Co. | | |
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Serial # | Date | Time |
| Weter Type | Wandlacturer | | | | | |
| Calibrated to Auto | and Solution | Manufacture | | Lot Num | l her | |
| Calibrated to Auto | | | | Temperature = | | |
| pH = Conductivity = | | oidity = olved Oxygen | | | | |
| - | | | | 1 | 1 | |
| ITurbidity Motor | l. | | | i | I | |
| Turbidity Meter Comments: | | | | | | |

| | _ | | | | | |
|-------------------------------------|--------------|-----------------------|--------------|---------------------------------------|------|--------|
| Meter Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | | Lot Number | er | |
| pH = | Turbi | dity = | | Temperature = _ | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = | | |
| Turbidity Meter | | | | | | ****** |
| Comments: | | | | | | |
| | | | | | | |
| Mater Type | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Manufacturer | Number | ing. ochum | Oction in | Dute | Time |
| Calibrated to Auto | cal Solution | Manufacture | * | Lot Numb | er | |
| pH = | | dity = | | Temperature = | | |
| Conductivity = | | lved Oxygen = | | | | |
| Turbidity Meter | | | | | · | |
| Comments: | 4 | | | · · · · · · · · · · · · · · · · · · · | | • |
| | | | | | | |
| | | Model | M(0 1-1# | Rental Co. | D-4- | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | aal Calutian | B# | | L of November | | |
| Calibrated to Auto | | Manufacture | | Lot Numb | ег | |
| pH = | | idity = | | Temperature = | | - |
| Conductivity = | Disso | lved Oxygen : | | _ Salinity = | | - |
| Turbidity Meter | | | | | | |
| | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| Comments: | Manufacturer | Model Number | Mfq. Serial# | Rental Co. Serial # | Date | Time |
| | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Comments: | | 1 | | Serial # | | |
| Comments: Meter Type | cal Solution | Number | r | i | per | |
| Meter Type Calibrated to Auto | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | per | |
| Meter Type Calibrated to Auto pH = | cal Solution | Number Manufacture | r | Serial # Lot Numb Temperature = | per | |

| | • | | | | | |
|---------------------|--|-----------------|---------------|-------------------------|------|----------------|
| · - | | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Manufacturer | Number | Wilg. Serial# | Serial # | Date | ime |
| | | | | | | |
| Calibrated to Autoc | al Solution | Manufacture | r | Lot Numb | er | |
| | | | | | | |
| pH = | | dity = | | Temperature = | | |
| Conductivity = | Disso | lved Oxygen = | | Salinity = _. | | v ^a |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | 1 801 - 1 | | Bontol Co | | |
| Motor Tuno | Manufacturer | Model Number | Mfg. Serial# | Rental Co. Serial # | Date | Time |
| Meter Type | Wanufacturer | itallibei | wig. contain | 00 | | Time |
| | | | | | | |
| Calibrated to Auto | cal Solution | Manufacture | r | Lot Numb | er | |
| pH = | | idity = | | Temperature = | | |
| Conductivity = | | lved Oxygen : | | | | |
| Conductivity = | | nrou oxygon | | | | · |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | | Rental Co. | | |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| | | | | | | |
| | | | <u> </u> | | | |
| Calibrated to Auto | cal Solution | Manufacture | er | Lot Numb | er | |
| pH = | Turb | idity = | | Temperature = | | _ |
| Conductivity = | | olved Oxygen | = | Salinity = | | _ |
| | | | | | 1 | |
| Turbidity Meter | | | | | | |
| Comments: | | | | | | |
| | | | | | | |
| | | Model | 1 | Rental Co. | | 1 |
| Meter Type | Manufacturer | Number | Mfg. Serial# | Serial # | Date | Time |
| Meter Type | The state of the s | | | | | |
| | | | <u> </u> | | | |
| Calibrated to Auto | cal Solution | Manufactur | er | Lot Numl | per | |
| pH = | Turk | oidity = | | Temperature = | | _ |
| Conductivity = | Diss | olved Oxygen | = | _ Salinity = | | _ |
| | | | | | | |
| Turbidity Meter | | | | |] | <u> </u> |
| Comments: | | | | | | |
| T . | | | | | | |

2-31 Data Gap Waste Handling Dash Card

Boeing Project Manager: Will Ernst

• Boeing Field Engineer: Joe Flaherty, Jennifer Parsons, or Fred Wallace

• Boeing Waste Specialist: Dan Machut

Consultant: Golder and EPIContractor: Cascade Drilling

Contractor Responsibilities

- Forecast type and volume of waste to be generated prior to mobilization, communicate needs to Boeing Field Engineer to ensure proper containers are ordered.
- Call Plant 2 Materials Handling to transport containers to project area.
- Fill containers with generated waste. Once containers are full and properly labeled, place containers on pallet and band containers to prepare them for transportation to designated accumulation area.

Consultant Responsibilities

- Apply appropriate soil container identification number and labels. Initiate "Container Log".
- Collect composite sample of individual container when full or sampling effort is complete. Assign appropriate sample ID per QAPP. Complete COC including program identifier.
- Secure lid and oversee contractors place containers on pallet and band containers for transportation to building 2-120 accumulation area, or alternate location assigned by Boeing Field Engineer.
- Contact Plant 2 Materials Handling for pickup and transportation to designated accumulation area.
- Confirm pickup and transportation to designated accumulation area and verify transport within three days.
- Forward copy of completed container log to Waste Tracking Group by email.

Boeing Field Engineer Responsibilities

- Help identify types of containers needed and determine accumulation area.
- · Order necessary containers from Drum Yard.
- Supply container labels and drum identification numbers.

Boeing Waste Specialist Responsibilities

 Create waste characterization profile for waste containers based on composite characterization samples.

Contact List

Will Ernst: 206-655-7724 Joe Flaherty: 206-769-5987 Jennifer Parsons: 206-715-7981 Fred Wallace: 206-930-0461

Dan Machut: 206-655-8344

Plant 2 Materials Handling: 206-655-3266

Groundwater Sampling Field Data

| | 2- | 31 Area | | | | a ter Sar _I kwila, Was | | ieiu Dala | l |
|--------------------|---------------------------------------|---------------|--|---------------------|---|---|-----------------|--|-----------------|
| Station | ſ | PL2-5 | OZA | <i>y</i> 1 10110 2, | Oddillo/ Fe |] | Date | 10/1/0 | 7 |
| Sample: ID | | 2-31-PL2. | | N-0 1 | 45/ms0 | Field Tea | m: (Initials) | JB, KA | |
| Field Condition | ons | Cloudy | ~55°F | | | | | | |
| | | | | Purge I | nformat | tion | | | |
| Well Diameter (in | .) | > 11 | 1 | _ | | | Submersible p | ımp | |
| Well Depth (ft.) | ·· <i>/</i> | 17.78 | 1 | | J . | , | Bladder Pump | | |
| Initial Depth to W | /ater (ft.) | 11.99 | | | | < | Peristaltic Pum | P | |
| Depth of Water C | | 5,79 | | | | , | Other: : | | - |
| 3 Casing Volume | es | 2.8 | | | | Start Time | 0815 | | _ |
| 1 Casing Volume |) | 0.9 | _ | | | End Time | 1215 | | 4 |
| | | | | | Iotal Ga | illons Purged | 4.0 | | |
| | | DTW (wells | | | | | | | · |
| Time | Gallons | only) | рН | Cond. | NTU | DO . | Temp. | ORP | Appearance |
| 0822 | 0.3 | 12.18 | 6.45 | 68,3 | 15.8 | 0.0 | 17,1 | - 87 | clear |
| 0825 | 0,5 | 12.19 | 6.39 | 63,2 | 8,7 | 0.99 | 17.1 | -38 | Clean |
| 0828 | 0.8 | 12,15 | 6135 | 60.0 | 8.9 | 0.62 | 17.1 | -87 | clear |
| 0831 | 1.1 | 12,15 | 6,32 | 59.4 | 9.2 | 0,34 | 17.1 | -85 | clear |
| 0834 | 1.3 | 12.18 | 6.31 | 59,1 | 9,2 | 0,28 | 17.1 | -86 | clear |
| 0837 | 1.5 | 12.20 | 6.31 | 58.9 | 14.2 | 0,26 | 17.1. | -87 | clear |
| 0840 | 1,7 | 12,20 | 6.31 | 520 | 4.35 | 0.26 | 17,1 | -87 | elear |
| | | | | | | | | | |
| | | | | | | | | | , say a suppose |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | **** | | | | |
| | | | | | | | | | |
| | <u> </u> | | | T . | *************************************** | | | | |
| | | | | Sample | e Inform | nation | | | |
| Sample Meth | hod(s) (ci | rcle): Perist | altic pump | | | | er Pump / O | ther | |
| , | | | AND THE PERSON NAMED IN TH | | | | | | |
| Analy | | Time | 1 | Type | | ative/Filtrati | | Comments | |
| VOC | | 0842 | , | L VOA. | , | | MS/MSD | 1,012,000 | 2.2 |
| Dissolved | | OBAZ | | -500_L HOPE | | TELEO | MS/MSD | 7 | Mescung |
| Total M | | 08AZ | 1-14HDPE/ | 1-500_L HVPE | HN03 | | MS/MSD | | Much |
| ~Chromi | | | | | | | | ggaggan a gradi (K. 1920) Simaha kabupatan kuma gan gungan kabupatan kabupatan kabupatan kabupatan kabupatan k | management of |
| Total and \ | | BAZ | 1-500_2 | 7 | NA | | Ms/MSD | | |
| TPH-Dx, | | 0842 | 2-500-LAG | 1/2-40-1 109. | NA/H | <u>cı </u> | MS/MSD | | |
| SVO | | 0842 | 4-500 | L AG | NA | | MS/MSD | Z 51/4 WW.Z | 5 VOC5 |
| PCI | Bs | 0842 | Z-11_ A | G | NA | | MS/MSD | | |
| Red | OX TOC | 0842 | 1-250. | L AG | 4,504 | | MS/MSD | | |
| Amm | oniq | 0842 | 1-500-1 | HORE | 142 SO1 | | MS/MSO | | |
| End Time | Э. | 1215 | | | | | | | |
| | | | | Comme | nts / Exc | eptions: | | | |
| Presence of | floating pr | roduct? | (ES (NO) | | Presenc | e of sinking | g product? | YES / (N | <i>y</i> |
| Nitrite/Nitra | | - A991 | 1-500 | ~ HOPE | N4 / | MS/MSD | 4,00 | = Festors | 100 |
| 50/Fide | · · · · · · · · · · · · · · · · · · · | OSAZ | 1-500- | 1 HOBE | 2,0AC lill | NOOH) MS/MS | 0 4.5 | Ma Fallas | Iron Ms |
| 105 | | 0897 | 1-1- H | P.E | N.A, | IS/MSD | 50 ° | C Cellon | Stor MSD |
| Density | | 0847_ |) ~/- | HVY E | MA | `\ | | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date Station 2-31-PLZ-503A-W-D Field Team: (Initials) Sample: ID Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) Other: : Depth of Water Column

1229

1340

2,5

Start Time

End Time

Total Gallons Purged

| | | DTW (wells | | | | | | | |
|------|---------|------------|------|----------|-------|------|-------|------|------------|
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1234 | 0.5 | 8.32 | 6.64 | 50.6 | 21.5 | 0,23 | 24,5 | -85 | clear |
| 1237 | 0,7 | 8.30 | 6,62 | 50.7 | 25.2 | 0.19 | 24.5 | -90 | clear |
| 1240 | 1.0 | 8.30 | 6.64 | 50.9 | 13.38 | 0.16 | 24.6 | -93 | clear |
| 1243 | 1.25 | 8.31 | 6,62 | 50.8 | 3,38 | 0,22 | 24.6 | -95 | clear |
| 1246 | 1.5 | 8,31 | 6:62 | 51.1 | 2.76 | 0,15 | 24,6 | -97 | clear |
| 1249 | 1,75 | 8.32 | 6,62 | 51,1 | 2,36 | 0.17 | 24,5 | 1-98 | clear |
| 1252 | 2,0 | 8.32 | 6.63 | 51.3 | 2,19 | 0.18 | 24.5 | -97 | ckan |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | <u> </u> | | | | | |
| | | | | | | | | | |

Sample Information

Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other

3 Casing Volumes

1 Casing Volume

| Analysis | Time | Bottle Type | Preservative/Filtrati | on Comments |
|--------------------|------|-------------------------|-----------------------|------------------|
| VOCs | 1254 | 3-40 ML VOA'S | HCI | MS/MSD |
| Dissolved Metals | 1254 | 1-11 MOPE/1-500 me HOPE | HNOz Field filkred | MS/MSD + Mercury |
| Total Metals | 1254 | 1-11 HOPE/1-500ml HAA | E HNO3 | 1 Mercury |
| Chromium VI | | , | | / |
| Total and WAD CN | Ж | | | |
| TPH-Dx, TPH-Gx | 1254 | 2-40ML YOR6/2-500MAG | HCI/NA | |
| SVOCs | 1254 | 4-500ML AG | NA | |
| PCBs | | | | |
| Redox Ammonia | 1254 | 1-500mL HOPE | Hesoy | |
| Dissolved Meto TOC | 1254 | 1-250ML AG | 4,504 | |
| End Time | 1340 |] | | |

| | | Comme | nts / Exceptions | | | |
|----------------------------|--------|---------------|------------------|---------------|------------|------|
| Presence of floating produ | ct? YE | ES / (N/Q) | Presence of sin | king product? | YES / (NO) | |
| Nitrate Nitrite Sulfate | 1254 | 1-500mL HPPE | NA | 3, 7 | = Ferrous | Iron |
| Sulfide | 1254 | 1-500 ML HOPE | Zn AOC | 3,4 | | |
| 795 | 1254 | 1-14 HOPE | νA | 5,0 | | |
| Density | 1254 | 1-12 HDPE | NA | | | |
| | | , , | | | | |

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington

| Station | | PL2-5 | | | | | Date | 10/2/0 | 19 |
|---------------------|----------------------|-----------------------|----------------|--|-------------------|-----------------------|----------------------|--------------|--|
| Sample: ID | | 2-31-PLZ | -SoiA- | W-0 | | Field Tea | ım: (Initials) | KA | |
| Field Condition | ons | Partly Su | nry | | | | | | |
| | | ν | | Purae I | nformat | ion | | | |
| Well Diameter (ir | n) | 2" | | _ | | | Submersible pu | ımp | |
| Well Depth (ft.) | 1.,) | 17,15 | | i di | J | | Bladder Pump | I* | |
| Initial Depth to V | Vater (ft.) | 1.15 @ | 0745 | | | | Peristaltic Pum | <u></u> | |
| Depth of Water (| | 6 | - , , | | | - | Other:: | | |
| 3 Casing Volume | | 2.88 | | | | Start Time | 0820 | | 4 |
| 1 Casing Volume | € | 0,96 | | | | End Time | 0940 |) | 4 |
| | | | | | Total Ga | llons Purged | 4,0 | | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рΗ | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 0827 | 17.4 | 11.22 | 7.88 | 0.410 | 4.32 | -0,02 | 18.86 | 5.0 | clear Yellow |
| 0856 | 2.5 | 11:35 | 6:61 | 0.408 | 1.90 | 0.97 | 18,90 | 12,3 | clear Yellow |
| 0859 | 2,7 | 11.35 | 10:71 | 0,400 | 1.63 | 0.28 | 18.91 | 1.0 | clear Yellow |
| 090 2 | 2,9 | 11,38 | 6:76 | 0396 | 1.84 | 0.26 | 18,90 | -4.8 | elear Yellow |
| 0905 | 3,2 | 11,39 | 6.80 | 0,392 | 1.84 | 0.20 | 18.85 | -9.5 | dear tellon |
| 0908 | 3.5 | 11.39 | 6,83 | 0,392 | 1,73 | 0.19 | 18,85 | -11,5 | clear Yellow |
| 9,00 | 1217 | 11/ -1 | 10102 | V . 37 4 | 1112 | | 12.00 | <u> </u> | |
| | | | | <u> </u> | | | | | |
| | <u> </u> | | | 1 | <u> </u> | | | | |
| | | | | | | <u> </u> | | | |
| | | | | 1 | | | | | |
| | | | | + | · - | | | | |
| | | | | | <u> </u> | | | | |
| <u> </u> | ļ | | | | | 1 | | | |
| L | 1 | <u> </u> | <u> </u> | Sample | e Inform | ation | L | .1 | 1 |
| Sample Met | hod(s) (ci | rcle): Perista | altic pum | | | | er Pump / O | ther | |
| Anal | vsis | Time | Bottle | е Туре | Preserva | ative/Filtrat | ion | Comments | |
| VO | | 0910 | | nL VOA'S | HCI | | | SDY | |
| Dissolved | | 0910 | | | | field filled | 1 1 1 1 1 1 | | L 4a |
| Total N | | 0910 | | 1-500ml HDF | -3 | I-W JILWE | 1:1-0/010 | / | LHA |
| Chromi | | UIIV | marie, | 1 NUME FIAT | FINOS | | | See | J - |
| Total and | | 0910 | 1-5110 | HOPE | - Spenner | | | | |
| TPH-Dx, | | V 11V | OUML | עיון ש | | | | | |
| SVC | | | | | | | | | |
| PC | | | + | | | | | | |
| | lox Toc | 0910 | 1.290 | L AG | H ₂ S1 | 0.1 | | | |
| <u> </u> | | 0910 | | | H ₂ S | | | | , and a special specia |
| 1-/mm | | | 1-500 mi | - HVIE | 1 H2> | <u> </u> | | | |
| End Tim | е | 0940 | <u></u> | | | <i></i> | | | |
| | | | 6 | Comme | nts / Exc | | | | <u> </u> |
| Presence of | f floating pi | roduct? Y | ES/NO | <i>)</i> | | e of sinking | product? | YES / NO | |
| Nitrate, | Nitrite, | Sulfate 09. | 10 1- | 500ml H | DPE | NA | | 4.5 Fer | rous Iron |
| Sulfig | de | 091 | 0 1- | BOOML HE | YE Z | AOC | | ******** | |
| 1.125 | Σ | 091 | V 1.1 | L HUP 5 | 10 | <u>Α</u> | | | |
| Densi | t y | 091 | V 1-11 | HDPE | N | <u>/-i</u> | | | |
| Notes: Where multip | nle visits are requi | ired to complete samp | ling, paramete | rs are to be chec | ked prior to same | oling for each visit. | Enter data under fie | Id comments. | |

2-31 Area Data Gap Groundwater Sampling Field Data

| Station Sample: ID Field Conditio | ns | PLZ- Z-31-PLZ- Inside | | 7-0 | | Field Tea | Date m: (Initials) | 10/2/09 KA | 7 |
|---|---------------------------|--|--|-------------------------|--------------------|---------------------|---|--|------------|
| h | | | | | | ion | | | |
| Well Diameter (in Well Depth (ft.) Initial Depth to W Depth of Water C 3 Casing Volume 1 Casing Volume | ater (ft.) column s | 2" 48.94 10.95 @ 41.30 ZA 18.3 | 0803 38.0(18.3 | Pur | | l (circle): | Submersible pu Bladder Pump Peristaltic Pump Other:: 1000 1703 | | |
| | | DTM (walle | | | | | | | • |
| Time | Gallons | DTW (wells only) | Hq | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 10:06 | 0.5 | 11.30 | 7.11 | 0.877 | 1.92 | 1,07 | 18.02 | -12.8 | clea |
| 1009 | 0.7 | 11,29 | 7,20 | 0.786 | 1.92 | 0.54 | 17.89 | -zq, 4 | clear |
| 1012 | 0,9 | 11.30 | 7,22 | 0,753 | 2,14 | 0.70 | 17.85 | - 33.2 | clear |
| 1015 | 1,2 | 11,31 | 7.20 | 0.725 | 2,48 | 0.59 | 17.83 | -29.0 | dear |
| 1018 | 1.4 | 11.32 | 7.17 | 0.722 | 2.27 | 0.33 | 17.81 | -24,8 | dear |
| 1021 | 1:6 | 11.32 | 7.17 | 0.725 | 2,29 | 0.32 | 17.82 | -25,4 | clour |
| 1024 | 1.9 | 11.34 | 7.19 | 0.728 | 1,99 | 0.18 | 17,81 | -30,8 | Clear |
| 1027 | 2,2 | 11.34 | 7,20 | 0.734 | 2.29 | 0.15 | 17,82 | -31,1 | clean |
| 1030 | 2.5 | 11.34 | 7,18 | 0,730 | 2.44 | 0.15 | 17.84 | -28,6 | clean |
| | | | | | | | | | - |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Sample Meth | nod(s) (ci | rcle). Perista | ıltic pump | • | Inform sible pum | | er Pump / Ot | her | |
| Analy | sis | Time | Bottle | туре Туре | Preserva | ıtive/Filtrati | on | Comments | |
| Voc | | 1032 | 3-40ML | | HCI | | MS/MS | P | |
| Dissolved | Metals | 1032 | | E, 1-500ml HOPE | | Field filteral | MS/MSO | + 66 49 | |
| Total M | etals | 1032 | | t-500ml HOPE | | | | LL Ha | |
| Chromit | um VI | | | , | | | | J | |
| Total and V | VAD CN | 1032 | 1-500 ml | - HOPE | ~ | | MS/MS | <u> </u> | |
| TPH-Dx, | ГРН-Gx | | | | | | | | |
| SVO | Cs | | | | | | | | |
| PCE | 3s | | | | | | | | |
| Redo | DOT XC | 1032 | 1-250. | mL AG | H ₂ 50, | Α | | 30-31-00-00-00-00-00-00-00-00-00-00-00-00-00 | |
| Ammoni | 4 | 1032 | 1-500 W | IL HOPE | H250 | 4 | | | |
| End Time | | 1203 |] | | | , | | | |
| Presence of Nitrite, 1 Sulfide TPS Density | Vitrale, S | Ulfate 1032 1037 | ES / NO 1 - 500, 1 - 600, 1 - L HD1 1 - L HD | MCHOPE ML HOPE PE | ZnOA | of sinking | product? 6,8 6,9 6,5 | YES/NO Ferrous I |) Zen |
| | | 10.30 | | 1.5. | | ling for each 1:-14 | Enter data under fiel | | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington 10/2/07 BOIC Station Field Team: (Initials) KA 2-31-PL2-501C-W-O Sample: ID Field Conditions ortside 1 uside **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump 78.6 Well Depth (ft.) (Peristaltic Pump p0805 Initial Depth to Water (ft.) Other:: 66,7 Depth of Water Column 1205 Start Time 32. 3 Casing Volumes 1338 **End Time** 1 Casing Volume 16.7 2.8 Total Gallons Purged DTW (wells **ORP** Appearance DO Temp. Cond. NTU only) рΗ Gallons Time clear 9.70 0.36 17,79 -13.8 7.31 218 12.00 33.42 dear -12.5 17.75 33,42 9.53 0.57 7.30 1,2 12.03 155 0.51 17,73 -13,4 clos 33.42 224 12.03 7,30 1.4 -3.3 0.32 17,74 dear 33.45 7.25 12.04 1227 1.6 clear 18,8 17,64 7,95 0.19 7,29 12,04 33.42 1230 1.8 -31,2 clear 33,39 0.18 17.101 7.35 17:05 1233 2.0 clear 0.15 - 35,5 7,82 17,61 7,37 33,41 1236 2.2 12,05 elear 0.13 56 -39.1 33.38 7.01 4,38 2.4 1239 12.05 -40,1 clear 33,37 6.96 0.13 17,52 7,38 12,05 17.42 2.6 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Comments Bottle Type Preservative/Filtration Time Analysis MSD MS/ 3-40mL VOA'S Non-Pres. 1245 **VOCs** L LL HNO, field fitter MS/MSD 1-11-HOPE+1-SOMLHDIE 1245 Dissolved Metals 1245 11 NOZ 1-12-40PE 1-500mL+DA **Total Metals** Chromium VI Total and WAD CN TPH-Dx, TPH-Gx **SVOCs PCBs**

Comments / Exceptions: YES / NO YES / (NO) Presence of sinking product? Presence of floating product? 9.2 = Ferrous Iron ZnOAC 1-500mL HDPE 1245 Sulfide 9.0 Nitrate, Nitrite Sultate 1245 1-500 ML HDAE 1245 1-L HOPE Density

HzSO4

H2504

1-250mL AG

1-500 mL HDPG

1245

1245

1350

Redox Toc

Ammonia

End Time

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2. Seattle/Tukwila, Washington Date Station PLZ-509A Field Team: (Initials) KA/JR 2-31-862-5094-10-0 Sample: ID Field Conditions TUSIDE **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 18 11.02 Peristaltic Pump Initial Depth to Water (ft.) Other:: 6.98 Depth of Water Column Start Time 0750 3 Casina Volumes 2.3 **End Time** 0956 1 Casing Volume 3,0 Total Gallons Purged DTW (wells **ORP** Appearance Gallons only) Ηq Cond. NTU DO Temp. Time 8,70 0,934 30,5 19.52 25,0 clear, odno 0801 0.61 0.5 11.04 23,9 19,59 8.92 0.906 0.43 6,7 clear, odor od 0804 0,6 11.03 0,38 -1.9clear Yellow 22,5 0807 8.97 0,895 0.7 11.04 14,6 -14.7 dear, Yellow 11.04 0.38 19.63 0810 0.892 -19.5 0.9 9,20 0.34 clear 51: alt Yellow 15.1 19.61 0813 11.04 0.891 -26.2 clear, stoubt Yellow 19.66 7816 9.26 O.OZ 14,4 05 0,28 9,27 13. 2 19.68 -26.7 dear sight Yelly 0019 11.04 0:890 9.78 0.42 19,68 -31,7 clear, slight Yellow 9.36 0.886 0822 11.04 0,32 -12.2 0825 11.04 9.26 0.885 19.66 clear slight lell 16 9,35 19.65 -74.0 clear stight Yel 0828 0.884 0.37 1:8 11.04 10.69 9,29 -11,4 11.04 27 0.384 0.34 19,65 clear, slight Yello 0831 2,0 -7.0 2,2 11-04 9:26 0.884 9.29 0:31 19,64 clear stight fellow 0834 9.85 19.66 -1114 clear, Slightle 0.884 0.27 0837 2,5 11.04 9,28 Sample Information Sample Method(s) (circle): Peristaltic pump/ Submersible pump / Bladder Pump / Other Bottle Type Preservative/Filtration Comments **Analysis** Time Duplicate 0839 **VOCs** 3-40 WL VOAS HCI 1-1LHD9E,1-500ml+102HNOz+filtered LL Ha Dudlicate 0839 **Dissolved Metals** 1-1LHOPE 1-SOOML HUY 0839 HNOZ **Total Metals** Chromium VI 1-500ML HOPE Duplicate Total and WAD CN 0839 2-500ML AG. 2-40ML VO A 1HC TPH-Dx, TPH-Gx 0839 0839 4-500ML AG NA **SVOCs PCBs** 0839 4,50 1-250ml AG Redox TOC 0839 1-500mL HDPE H-504 Ammonia 0956 **End Time**

Comments / Exceptions:

Presence of sinking product?

YES /(NO)

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Presence of floating product?

Nitrale, Nitrike, Sulfate 0839 1-500 M. HOPENA

TDS 0839 1-500me HDPE Devisity 0839 1-16 HDPE

Sulfide 0837, 1-500pt HDPE

Duplicate Time 0850

YES / NO

Ferrous Ivan 34

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington 15/09 Date Station ~509B Field Team: (Initials) 3-31-PL2-509B-W-0 Sample: ID KA. Field Conditions **Purge Information** 23 Purae Method (circle): Submersible pump Well Diameter (in.) Bladder Pump 49.90 Well Depth (ft.) Peristaltic Pump .00 Initial Depth to Water (ft.) Other:: 38,90 Depth of Water Column 1000 Start Time 18.6 3 Casing Volumes **End Time** 1120 1 Casing Volume Total Gallons Purged DTW (wells Cond. NTU DO Temp. ORP **Appearance** only) Time Gallons pΗ 0,29 8.19 38.7 179 Cloudy - Gray 11111 1012 1,25 11.05 10.23 890 0.36 18.2Z -42,1 1015 11.08 10:26 1,5 1,023 1025 10.02 0.782 125 0,27 18.31 18.5 11.08 2.25 0,756 34,0 18,27 -17/ 11.08 1028 10,04 0,24 colorless 1031 2. 9 11,08 0,741 17, 0.20 18.26 - 18,0 10.05 1034 0.750 0.19 18.24 -31.0 clear, colorles 10.31 11,08 10:13 3,2 10.15 0.754 9.31 0.18 18.25 -30,4clear colorless 1038 3,5 4.08 9,16 28.0 0.763 3,7 10,13 0.18 18,25 041 11.08 Sample Information Sample Method(s) (circle): Peristaltic pump// Submersible pump / Bladder Pump / Other Preservative/Filtration Comments **Bottle Type Analysis** Time 1043 **VOCs** 3-40mL VOAS HCI HNO. I filtered Dissolved Metals 1043 1- ILHOPE 1-500 ML HOPE Total Metals 1043 1-ILHPPE-1-500mLHDPZ HNOR Chromium VI 1043 Total and WAD CN 1-SOUML HOPE NA TPH-Dx, TPH-Gx **SVOCs PCBs** 11-50u 1043 1-250 mal. Redox ToC 1-500 ML HOPE 1043 H=50, Ammonia 1120 **End Time** Comments / Exceptions: YES / NO YES / NO Presence of sinking product? Presence of floating product? 1-500ML HIDPE Notrate, Notrite, Sulfate 1043 1043 1-500ml 40PE ZNOAC <u>Sulfide</u> 1043 TOS

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments

Density

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date [Station 509 A Field Team: (Initials) 2-31-PLZ. SOJA- W. O BOB JOKA Sample: ID Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) Peristaltic Pump Initial Depth to Water (ft.) MO Other: : Depth of Water Column Start Time 1130 3 Casing Volumes 13.8 **End Time** 1 Casing Volume 4,6 Total Gallons Purged DTW (wells Appearance **ORP** Cond. NTU DO Temp. only) Time Gallons pΗ 1013 8,13 0.273 - 5/-9.69 15 19.04 1134 984 9.86 1.167 Clear 7.82 19.08 98.1 0.270-52 1137 n 268 9 214 19.07 971 8.24 9.86 71 1140 94.6 19 08 9,84 0,2612 7.59 8.27 1143 5,84 6.427 19.17 97.6 8.26 9.88 1146 19.10 915 5.98 1149 ,8 8,27 9.90 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Preservative/Filtration Comments **Bottle Type** Analysis Time HCI **VOCs** 1150 3.40, L VOA. HARD & FIELD FUTGRE Dissolved Metals 1.11 LINDE 1-500-LHOPE 1150 Total Metals 1150 1-16 HPPE, 1-500, L. Ha Chromium VI Total and WAD CN TPH-Dx, TPH-Gx A) A 1150 2.500-LAS, 2-40-LLO Z SIM PAA. SVCC + **SVOCs** 1150 4.500-LAC **PCBs** 50 Redox Toc 1150 1150 1-500-L HPPE Ammenia 1200 **End Time**

Presence of floating product? YES NO Presence of sinking product? YES NO

Nitrate N. tribe So (Ceto 1150 1-500-L HDPE NA FERRUS Tran = 1.0 mg/L

50 Cit 1150 1-1500-L HDPE 2n OAL (DAANOH)

TO 1150 1-14 HDPE NA

Dengily 1150 1-14 HDPE NA

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington

| Station | | PLZ-505 | A | | | | Date | 10/5/03 | |
|---|--|--|---|---|---|--|-----------------|---------------------------------------|----------------------|
| Sample: ID | | Z-31-PLZ. | | h1-01 | | Field Tea | m: (Initials) | JBIK | Ą |
| Field Condition | ns | Sunnet C | | , | | | | | |
| | | | | Durgo | nformat | ion | | | |
| | . ! | - V | 1 | Purge I | | | Submersible pu | ımn | |
| Well Diameter (in | .) | 4' | | Pur | ge ivietnot | , | Bladder Pump | mb | |
| Well Depth (ft.) | lator (ft) | 24.5 | | | | | Peristaltic Pum | n. | |
| nitial Depth to W Depth of Water C | | 12,72 | | | | | Other:: | • | |
| 3 Casing Volume | | 24.9 | | | | Start Time | 1255 | | |
| 1 Casing Volume | | 8.3 | | | | End Time | 1435 | | |
| J | | | | | Total Ga | llons Purged | 1.8 | | |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| | | | 1 | 0.6622 | 6.45 | 0.3573 | 22.95 | -32.8 | clear |
| 1306 | 04 | 11.70 | /0,56 | | | 0.367 | 22.75 | -30.7 | clear |
| 1309 | , 5 | 11.70 | | 0.6602 | 5.79 | | | -3Q.(| |
| 1313 | -7 | 4.70 | T | 0 658 | 5757 | 0.307 | 22.6/ | 1 | Chap. |
| 1315 | 9 | 11.70 | 10.37 | 6.656 | 5.63 | 0.302 | 22,55 | -31.3 | 100 |
| 1318 | <u> </u> | 11.70 | 10.37 | 6.655 | 7.16 | | 22.57 | -35.5 | Clear |
| 1394 | 1.3 | 11,70 | 10.38 | D. 6552 | 7.9/ | 0.322 | 2259 | - 34.7 | Clear |
| | | | | | | | | - | |
| | | | | | | | | | |
| | | | | | | <u> </u> | | | |
| | 1 | | | | | | | | |
| | | | | | | | | | 1 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | e Inform | | 1 - 100000 | | |
| Sample Metr | nod(s) (ci | rcle); Perista | altic pump | | | | er Pump / O | ther | |
| • | | rcle): Perista | Marie Control of the |) Subme | rsible pum | ıp / Bladde | | | |
| Analy | /sis | Time | Bottle |) Subme | rsible pum Preserva | | | Comments | |
| Analy VO | rsis Cs | Time | Bottle | O Subme Type L VOAs | Preserva | np / Bladde ative/Filtrati | ion | Comments Deplicate | |
| Analy VOC Dissolved | vsis Os I Metals | Time 1336 1336 | Bottle 3-40 | O/Subme Type L VOAs J-5002 HOR | Preserva | np / Bladde ative/Filtrati | ion | Comments | |
| Analy VOO Dissolved Total M | vsis Os I Metals Ietals | Time | Bottle 3-40 | O Subme Type L VOAs | Preserva | np / Bladde ative/Filtrati | ion | Comments Deplicate | |
| Analy VOC Dissolved Total M Chromi | vsis Os I Metals Ietals um VI | Time 1336 1336 | Bottle 3-40 | O/Subme Type L VOAs J-5002 HOR | Preserva | np / Bladde ative/Filtrati | ion | Comments Deplicate | |
| Analy VOC Dissolved Total M Chromic | vsis Cs I Metals Ietals um VI WAD CN | Time 1330 /330 /330 | Bottle 3-40. 1-11 HOPE 1-11 HOPE | Pype L VOAs J-500-L HOW | Preserva HCI HNO, TO | np / Bladde ative/Filtrati | ion | Comments Deplicate | |
| Analy VOC Dissolved Total M Chromi | vsis Cs I Metals Ietals um VI WAD CN | Time 1336 1336 | Bottle 3-40. 1-11 HOPE 1-11 HOPE | O/Subme Type L VOAs J-5002 HOR | Preserva HCI HNO, TO | np / Bladde ative/Filtrati | ion | Comments Diplicate Oup licate | |
| Analy VOC Dissolved Total M Chromic | vsis Cs I Metals letals um VI WAD CN TPH-Gx | Time 1330 /330 /330 | Bottle 3-40 1-11 HOPE, 1-12 HOPE, 2-502-1 A | Pype L VOAs J-500-L HOW | Preserva HCI HNO, TO | np / Bladde ative/Filtrati | ion | Comments Deplicate | y PAHs |
| Analy VOC Dissolved Total M Chromic Total and V TPH-Dx, | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx CS | Time 1330 /330 /330 | Bottle 3-40 1-11 HOPE, 1-12 HOPE, 2-502-1 A | O/Subme Type L VOAS J-SOLL HOPE I-SOLL HOPE C/Z AOLL VO | Preserva HCI HNO. H HNO. | np / Bladde ative/Filtrati | ion | Comments Diplicate Oup licate | y PAHs |
| Analy VOC Dissolved Total M Chromit Total and V TPH-Dx, SVO | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx CS | Time 1330 /330 /330 | Bottle 3-40 1-11 HOPE, 1-12 HOPE, 2-502-1 A | Subme Type L VOAS J-SCOL HOPE I-SCOL HOPE C/Z JOL 10 | Preserva HCI HNO. H HNO. | np / Bladde ative/Filtrati | ion | Comments Diplicate Oup licate | y PAHs |
| Analy VOC Dissolved Total M Chromin Total and N TPH-Dx, SVO PCE Red | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx Cs Bs ox Toc | Time 1330 1330 1330 1330 | Bottle 3-40 1-11 HOPE, 1-11- HOPE, 1-12- A-500 | Subme Type L VOAS J-SCOL HOPE I-SCOL HOPE C/Z JOL 10 | Preserva HCI HNO. H HNO. | np / Bladde ative/Filtrati | ion | Comments Diplicate Oup licate | y PAHs |
| Analy VOC Dissolved Total M Chromin Total and \ TPH-Dx, SVO PCE Red | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx Cs Ss ox Toc | Time 1330 1330 1330 1330 1330 1330 | Bottle 3-40 1-11 HOPE, 1-11- HOPE, 1-12- A-500 | Subme Type L VOAS J-SCOL HOPE I-SCOL HOPE C/Z AOL VO L A C | Preserva HCI HNO. H HNO. | np / Bladde ative/Filtrati | ion | Comments Diplicate Oup licate | y PAHs |
| Analy VOC Dissolved Total M Chromin Total and N TPH-Dx, SVO PCE Red | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx Cs Ss ox Toc | Time 1330 1330 1330 1330 | Bottle 3-40 1-11 HOPE, 1-11- HOPE, 1-12- A-500 | Subme Type L VOAS J-SOAL HOPE L-SOAL HOPE L-AG L-AG L-AG L-AG L-AG | Preserva HCI HNO.+ HNO.+ HNO. NA NA NA H2 S | HCI | ion | Comments Diplicate Oup licate | y PAHs |
| Analy VOC Dissolved Total M Chromin Total and N TPH-Dx, SVO PCE Red American | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx Cs Ss ox Toc | Time 1330 1330 1330 1330 1330 1330 1330 | Bottle 3-40 1-11 HOPE, 1-12 HOPE, 1-12 HOPE, 1-12 HOPE, 1-12 HOPE, 1-250 1-250 | Comme | Preserva HCI HNO. H H HNO. H H H H H H H H H H H H H H H H H H H | HC) PHONE PHON | 2 3voc | Comments Duplicate Ouplicate + z s// | y PAHs |
| Analy VOC Dissolved Total M Chromin Total and \ TPH-Dx, SVO PCE Red End Time | vsis Cs I Metals Ietals um VI WAD CN TPH-Gx Cs Ss ox TCC | Time 1330 1330 1330 1330 1330 1330 1435 roduct? | Bottle 3-40 1-11 HOPE 1-11- HOPE 1-12- HOPE 1-12- HOPE 1-250 1-250 1-250 1-250 | Comme | Preserva HCI HNO, H NA NA NA NA NA Presence | HCI | 2 3voc | Comments Diplicate Oup licate |) |
| Analy VOC Dissolved Total M Chromin Total and N TPH-Dx, SVO PCE Red American End Time | I Metals I Metals I Metals I Metals I Metals I MAD CN TPH-GX CS SS OX TOC I Metals I | Time 1330 1330 1330 1330 1330 1330 1330 1330 1330 1330 1330 | Bottle 3-40 1-11 HOPE., 1-11-HOPE., 1-12-50 1-250 1-250 1-500 30 | Comme | Preserva HCI HNO. H HNO. H NA NA NA NA NA NA NA NA NA N | PHONE | product? | Comments Duplicate Out Track + 2 5// | y PAHs Deprose Inc= |
| Analy VOC Dissolved Total M Chromin Total and N TPH-Dx, SVO PCI Red American End Time | rsis Cs I Metals Ietals Ietals Um VI WAD CN TPH-GX Cs Ss OX TOC Including probability for the formula in the fo | Time 1330 1330 1330 1330 1330 1330 1330 1435 roduct? Y | Bottle 3-40 1-11 HOPE, 1-12 HOPE, 1-250 1-250 1-500 (ES / NO 30 | Comme Comme 1-500 LAG LAG LAG LAG LAG LAG LAG L | Preserva HCI HNO. + HNO. + | HCI eptions: e of sinking | 2 3voc | Comments Duplicate Out Track + 2 5// |) |
| Analy VOC Dissolved Total M Chromin Total and N TPH-Dx, SVO PCE Red American End Time | rsis Cs I Metals Ietals Ietals Um VI WAD CN TPH-Gx Cs Ss Ox Toc Ifloating process In this form | Time 1330 1330 1330 1330 1330 1330 1330 1330 1330 1330 1330 | Bottle 3-40 1-11 HOPE, 1-11- HOPE, 1-12-50 1-250 1-250 1-500 200 300 300 | Comme Comme 1-500 LAG LAG LAG LAG LAG LAG LAG L | Preserva HCI HNO. + HNO. + | PHONE | product? | Comments Duplicate Out Track + 2 5// |) |

| | 2- | 31 Area i | | | Seattle/Tul | | | eiu Data | |
|--------------------------------------|------------|-----------------|------------|--|--------------|-------------------|------------------|------------|--------------|
| Station | [| PLZ-Z33A | Doeing | i ian z, | ocatio i a | viila, viac | Date [| 10/1/09 | |
| Sample: ID | | 2-31-762- | -233A- | W-0,1 | | Field Tea | m: (Initials) | JB KA | |
| Field Condition | ns | * 1 | n y | | | | | | |
| | | | | Durgo I | nformati | on | | | |
| | . 1 | ,,,,,, | | _ | | | Submersible pu | mp | |
| Well Diameter (in. | .) | 25,0 | | Ful | ge Melhoc | , | Bladder Pump | тр | |
| Well Depth (ft.) Initial Depth to Wa | ater (ft) | 9.90 | | | | | Peristaltic Pump | | |
| Depth of Water Co | | 1 1 44 - 1 - 1 | | | | | Other:: | | <u>-</u> |
| 3 Casing Volumes | () | 29,4 | | | | Start Time | -07+0-1B | 1000 | |
| 1 Casing Volume | (KA) | 2.4 9.8 | | | | End Time | 1200 | · | |
| | | | | | Total Gal | lons Purged | A. C. gylen | <u>-ر)</u> |] |
| | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 0727 | 1:25 | 9.90 | 8.39 | 0,940 | 7,50 | 052 | 16.04 | 69,7 | clear |
| 0730 | 7,5 | 9.92 | 8,63 | 0,977 | 7.35 | 0,38 | 16:07 | 47.7 | clear |
| 0733 | 1.75 | 9,92 | 8.72 | 0.927 | 7.94 | 0.35 | 16.05 | 40.1 | clear |
| 0736 | 210 | 2-92 | 8,75 | 0.922 | 7.27 | 0.33 | 16.03 | 37.0 | clear |
| 0739_ | 2.25 | 9,91 | 84,99 | 0,916 | 7,27 | 0.31 | 16,05 | 35.4 | clear |
| | | | 9B Meile | · Repla | us | | | | · |
| | | | | , | | *** | 4 40 | | |
| 1612 | 3.0 | 10,55 | 6.75 | 0.101 5/2 | 7.6 | 2,02 - | 17.3 | -113 | Clery |
| 1015 | 3.2 | 10.57 | 6.73 | 0.093%_ | 6,0 | 1.439 | 17.3 | -118 | Ckey |
| 1016 | 3.4 | 10.68 | 6.68 | 83.8 % | 8,0 | 0969 | 17.3 | 720 | den |
| 1021 | 3,6 | 10,59 | 6.67 | 87.45 | 9,2 | 0.922 | 17.2 | -24 | class |
| 1024 | 3.8 | 10:60 | 6,67 | 86.623 | 8.6 | 0.832 | 17.3 | 7/25 | cleur |
| 1027 | 4.0 | 10,62 | 6.68 | 86.1€ | 6.7 | 0.507 | 17.13 | 728 | olen |
| 1630 | 4.2 | 10,64 | 6.68 | 862= | 6.1 | 0.78 2 | 17,3 | 130 | Clery |
| | | | | | e Inform | | | | |
| Sample Meth | nod(s) (ci | ircle). Perista | ıltic pump | √ Subme | rsible pum | p / Bladde | er Pump / Ot | her | |
| Analy | rsis | Time | Bottle | Type | Preserva | ıtive/Filtrat | ion | Comments | |
| VOC | | 1035 | 3-40_1 | | HG) | | Dup Vical | ~ @ | 1100 |
| Dissolved | | 1035 | | | HNO /E | ELD CUTSES | | e + 40 | L 4,@1100 |
| Total M | | 1035 | | 1-500-1 HOPE | | 10-11-11-11-12-23 | Duplient | e @ 110 | 08 |
| Chromit | | 7000 | LITERUIE | 11072 | 1 3 | | | | |
| Total and V | | 1035 | 1-500-L 1 | IOPY. | NA | | Diplicate | S @ 110 | 70 |
| TPH-Dx, | | 1035 | | 1/240-L10 | | HCI | Diselie | | 1100 |
| SVO | | 1035 | 4-500- | | NA | | Duplaste | | 100 |
| PCE | | | 1 | | | | · f | | |
| Redo | OXTOC | 1035 | 1-250 | L AG | H1 SO4 | L. | Rolanda | . @ // | 00 |
| | nîa | 1035 | | L HOPE | 4,50 | 4 | Duplicat | e @ 11 | 00 |
| End Time | • | 1200 | | • | Same. | | 3 | | 3 |
| | | | \sim | Comme | nts / Exce | | | \/=a (i) | |
| Presence of | | | ES (NO | <u>) </u> | | of sinking | g product? | YES (NO | |
| Nitrite/Nit | nde/Sulfa | he 1035 | 1-500-L | HOPE | NA | 1 | Donket | All - | Im - 4,6 |
| Silade | | | 1-16 HA | HIRPE. | Z,000 N.A | - LADID MEDI | Traver - | WITO FUNUS | Iron-Dep 4.6 |
| 1117 | | 113 | 1-11- HA | V.S. 27 . | 11/4 | | AANUL Color | NEW LAND | |

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

2-31 Area Data Gap Groundwater Sampling Field Data

| | | | Boein | g Plant 2, | Seattle/Tu | ukwila, Was | shington | | |
|-----------------------|---|---------------------|-----------------|-------------------|------------------|-----------------------|-----------------------|-------------|--|
| Station | | PLZ-507 | ß | | | | Date | 10/6/09 | |
| Sample: ID | | 2-31-PLE- | 5078- U | -0,1 | | Field Tea | am: (Initials) | JP /k/ | 4 |
| Field Condition | ns | Sunmy & C | heav | | | <u> </u> | | | |
| | | | | Purae l | nformat | tion | | | |
| Well Diameter (in | 1 | Z. | 1 | _ | | | Submersible pu | amp | |
| Well Depth (ft.) | , | 45' | | | 9 | . () | Bladder Pump | | |
| Initial Depth to W | ater (ft.) | 1057 | | | | | Peristaltic Pum | p) | |
| Depth of Water C | olumn | 34,4 |] | | | | Other: : | | |
| 3 Casing Volume | | 16,5 | <u> </u> | | | Start Time | 1210 | | |
| 1 Casing Volume | | 5,5 |] | | | End Time | 1415 | | |
| | | | | | Iotal Ga | allons Purged | 1.2 geller | <u> </u> | |
| * 6 | | DTW (wells | | | | | | | |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| 1221 | .8 | 10,58 | 6.68 | 0.1145/2 | 665 | 2.00-2 | 15.2 | -106 | closy |
| 1229 | 1,6 | 10,59 | 6.57 | 72.3 = 3 | 155 | 1,22 8 | 15.2 | ~110 | closty |
| 1234 | 2,2 | 10,59 | 6,66 | 69.8 23 | 122 | 1.06 = | 15.2 | -117 | elast |
| 1237 | 2,4 | 10,60 | 6.71 | 66.12 | 89.9 | 0.98 学 | 15.1 | 151 | deth |
| 1240 | 2,6 | 16.60 | 6.73 | 62,8 25 | 83.c | 0912 | 15.2 | -123 | ch At |
| 1248 | 3,0 | 10 60 | 675 | 588= | 59.4 | 0807 | 15.2 | -126 | class |
| 11251 | 3.2 | 10,60 | 6.76 | 3-8.5 Z | 5019 | 0.78 7 | 15.2 | -127 | ck.M |
| 1254 | 3.4 | 10,60 | 6.76 | 58,0 € | 503 | 0.767 | 15.2 | -127 | chat |
| 1257 | 3.6 | 10.60 | 6.77 | 57.92 | 44.3 | 047 | 15.2 | -128 | closs. |
| - | | | | | | | | | |
| | | | | | | | · | | |
| | | | | | | | | | |
| | <u></u> | | | | | | | | |
| | | | <u> </u> | † | | | | | |
| L | 1 | | | Sample | Inform | ation | 1 | | |
| Sample Meth | nod(s) (ci | rcle) Perista | altic pump | | | | er Pump / Of | ther | |
| Analy | reie | Time | Bottle | е Туре | Preserv: | ative/Filtrati | ion | Comments | . |
| VOC | | 1360 | 3-40-L 1 | | 1401 | auvon nuau | 1 | e@1315 | |
| Dissolved | | 1300 | ··· | 7 | 1 | ELD FILTERED | 1 | 2 @1315 | + 62-145 |
| Total M | | | | 1-500-2 HOPE | 7 | ELLY TILTERED | Diplical | | + 11 /- |
| Chromit | | 1300 | 11-11-1484E | /1 SOLLHPRE | 14103 | | Duplia | NE CON 315 | |
| Total and V | | 1300 | 1-500, | linge | A . A | | n 1 1 | C C | To Distance Mark To Comment |
| | | 7500 | 1-300 | TYPE | NA | | Dup liaste | (CV_1315) | A 10 M - 24 |
| TPH-Dx, 7 | *************************************** | 1 | 1 | AC | 0.10 | | 10 11 1 | A 12 = | |
| SVO | | 1300 | 4.500- | | NA | | Popliate | | |
| PCE | | 1300 | Z-ILA | | NA | | rup (cate | - QU315 | |
| | ox TOC | 1300 | 1-2500 | | H250mg | | Duplicat | -(0)/1315 | |
| Amm | chia | 1300 | 1-500- | LHOPE | 14,504 | | <u> </u> | | , , , , , , , , , , , , , , , , , , , |
| End Time | | 1415 | | | | | | | A STATE OF THE STA |
| | el u | | F0 (1) | Comme | nts / Exce | | | VEO (C) | |
| Presence of | | | ES (NO) | | | e of sinking | | YES / NO | |
| N.trile/Nito | xk/SIGI | < 1700 | 1-50 | HOPE | <i>N</i> | A | Supposed (2) 1315 | Form'S | |
| 501626 | | /300 | 1-57% | LIDET | Z_{n} | DAC YALAA | LUH JK pliadi | , c | Ivon: 30 Pup |
| Density | | 1300 | | HDRF | | o. O. | 1. cde '@ 13 | | |
| | | | llhe | 1 | /.×.¥.}. | *.V | yan magazare | | |
| Notes: Where multiple | e visits are requir | ed to complete samp | ling, parameter | s are to be check | ed prior to samp | oling for each visit. | Enter data under fiel | d comments. | |

2-31 Area Data Gap Groundwater Sampling Field Data Boeing Plant 2, Seattle/Tukwila, Washington Date 10/6/60 Station PL2-507A Field Team: (Initials) Sample: ID 2-31-PL2-567A-W-0.1 Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 18 Peristaltic Pump 10.15 Initial Depth to Water (ft.) Other:: 7.85 Depth of Water Column Start Time 1426 3 Casing Volumes 3.9 **End Time** 1555 1 Casing Volume 1.3 Total Gallons Purged 1.8 DTW (wells **ORP Appearance** Cond. NTU DO Temp. Gallons only) рН Time 5.29 7 42 21.3% 25,7 1428 630 1.0 10,15 7.907 6,00 14.6 19.3 63 1.2 10.19' 1431 205 0 67 7.315 四年13 5.81 6.8 10,21' 19.5 1434 67 c lear 19:4 5.80 70.4 6.8 6.6Z 10.41 19.4 20,5 lot clear 6.43 10,38 5.81 1,5 clear 61 1443 10,32 5.86 20.7 10 5.96 31 20.7 59 5,88 58 5.85 20.9 9. 5,88 19.3 10,30 1444 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other Bottle Type Preservative/Filtration Comments Time Analysis P. 1500 **VOCs** 1451 3-40 LL VOAs 1 SA Doolical 1-16 HOPE/1-SOUL HOPE ASI HNOS /FILIERSOFIELD Dissolved Metals HNOS 451 Total Metals 1-124006,11-500-1498E Chromium VI Total and WAD CN 1451 1-500_1 HOPF NA TPH-Dx, TPH-Gx NA **SVOCs** A.500, L AG 1451 **PCBs** NIA 1451 2-16 AG 1-250-LAG 145 Redox Tax His SQA 1-500-L HOPE H. 50 1451 1555 End Time Comments / Exceptions: Presence of sinking product? YES / NO YES / NO Presence of floating product? Ferans 200 2 [8 4] 1-500-L HOPE NA N. tate/N. trita/Sulfalu 1451 ZNAOC (AUKOU) SU/Cide 1451 1-500-L HDDE

1-11 HOPE

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

TDS

2-31 Area Data Gap Groundwater Sampling Field Data

Boeing Plant 2, Seattle/Tukwila, Washington Date [10/7/09 PL2-507C Station Field Team: (Initials) JB/KA Sample: ID 2-31-PLZ-507 C-U-0 Field Conditions **Purge Information** Purge Method (circle): Submersible pump Well Diameter (in.) Bladder Pump Well Depth (ft.) 76: Peristaltic Pump 10.82 Initial Depth to Water (ft.) Other:: Depth of Water Column 65.18 Start Time 0755 3 Casing Volumes 31,2 **End Time** 19915 10.4 1 Casing Volume Total Gallons Purged 2.2 94//0-DTW (wells **ORP** Appearance рΗ Gallons only) Cond. NTU DO Temp. Time 1,52 % 18 23 15,1 -161 class 9.69 10.80 711 0318 10 1.56% 7.63 1,09 73 15,0 -166 0821 1836 10.86 713 Clare 1.012 7.14 8,44 0824 16 9 10.90 1.54% 15.1 -170 1.4 6.19 15:1 -172 1954 0827 7.15 16 10.97 7.15 574 0922 15.1 -174 0830 18 10.97 Sample Information Sample Method(s) (circle): Peristaltic pump / Submersible pump / Bladder Pump / Other **Bottle Type** Preservative/Filtration Comments Analysis Time HICLB NOT PRESENTED **VOCs** 0240 3-40-L VOAC 14NO, FLELD FLETERE Dissolved Metals 0540 1-11 HOPE/1-500, LAD IN HOPE/F-SOON HOW **Total Metals** 0840 HMO2 Chromium VI Total and WAD CN NA 0840 1-SOOL HOPE TPH-Dx, TPH-Gx **SVOCs** 0840 NA 4.500ml AG-PCBs 0840 1-1L AG NA Redox toc 0840 14,50 1.250m) A6 H-500 0840 1-5ca-L HDPE End Time 0915 Comments / Exceptions: Presence of sinking product? Presence of floating product? YES (NO) Nitrate/Nitrate/Solfate 0890 T-SOOL HOPE NA S. IFADE 0840 1-500-L HOPE ZnAOC (Add M. 04) Ferrous 0840 1-12 HOPE NA TD5 Densila Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

| | 2- | 31 Area [| Data C | ap Gro | oundwa Seattle/Tu | iter Sar | npling F | ield Data | |
|--|-----------------------------|----------------|-----------------------|---------------|---|--------------------------|---|-----------|------------|
| tation ample: ID ield Conditio | ons | | DOGIN | y Flant 2, | Seattle/Tu | | Date m: (Initials) | | |
| /ell Diameter (ir /ell Depth (ft.) itial Depth to W epth of Water C Casing Volume Casing Volume | /ater (ft.) Column es | | | | nformat ge Method | I (circle): | Submersible pu Bladder Pump Peristaltic Pum Other: : | | - |
| | | DTW (wells | | المحمد المحمد | | lons Purged | Town | ODD | Annogrango |
| Time | Gallons | only) | рН | Cond. | NTU | DO | Temp. | ORP | Appearance |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | *************************************** | | | | |
| | | | - Marina | | † | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Sample Met | hod(s) (ci | rcle): Perista | ltic pum _l | | e Inform rsible pum | | er Pump / O | ther | |
| Analy | vsis | Time | Bottle | е Туре | Preserva | tive/Filtrat | ion | Comments | |
| VO | | | | | | | | | |
| Dissolved | | | | | | | | | |
| Total M | 1etals | | | | | | | | |
| Chromi | um VI | | | | | | | | |
| Total and | | | | | | | | | |
| TPH-Dx, | | | | | | | | | |
| SVC | | | | | | | | | |
| PC | | | | | | | | | |
| Red | ox | | | | | | | | |
| End Time | e | | | | | | <u> </u> | | |
| Presence of | f floating pi | oduct? YI | ES / NO | | Presence | eptions: e of sinking | g product? | YES / NO | |

Notes: Where multiple visits are required to complete sampling, parameters are to be checked prior to sampling for each visit. Enter data under field comments.

Chain of Custody Record & Laboratory Analysis Request

| | Chain of Custody Record & Laboratory Analysis Request | 1& Labo | ratory Aı | nalysis F | \equest | - | | | | 3 | おく | CN NOT Preserved | ved | |
|------------|--|---------------------------------|----------------|-----------------------|----------------|--------------------|----------------|------------------|--------------------|----------|-------------------|------------------|----------------------|---|
| | ARI Assigned Number: | Turn-around Requested: standard | Requested: | standard | | Date: | 10/7 | 10/7/2009 | 0 | | | | Analytic Analytic | Analytical Resources, Incorporated Analytical Chemists and Consultants |
| | ARI Client Company: The Boeing Company | | Phone: | | | Page: | _ | of | 2 | | | | 4611 | 4611 South 134th Place, Suite 100 Tukwila, WA 98168 |
| | Client Contact: Will Ernst | | | | | No. of Coolers: | | Cooler Temps: | | | | . | 206- | 206-695-6200 206-695-6201 (fax) |
| | Client Project Name: | and and are | 10 acitabitae | 3 1848 000 | 30.00 | | | A | Analysis Requested | equested | | | | Notes/Comments |
| | riant z - z-3 i Data Gaps Investigation 0 3- 1040-008-200.03 | Jala Gaps III | restigation or | 3- 040-003-, | 200.002 | | | | | (8 | C | | | hourson - wall |
| | Client Project #: P2DG-2-31 | Samplers: J | . Berntha | J. Bernthal, K. Addis | lis | (١)(: | letals | БНТ | sletəN | CHg (3 | M∀I | ×9-H | - | VOAS |
| | Sample ID | Date | Time | Matrix | No. Containers | VOCs | M. asiQ (S) | LissiO (5) | A lstoT (S) | I lefoT | Total 8 CN (4) | UWTP (G) | IЧТWИ (მ) | |
| 0 | Trip Blank | 60/+101 | , | IQ | 23 | / | | | | | | ¥3. | | continued on page 2 |
| (3) | 12-31-PL2-507C-W-6 10/7/09 | 60/4/01 | | 6W | 20 | * 7 | 7 | 7. | 7 | 7 | 7 | | | 7 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | 4 | | | | | |
| | | | | - | · | | | | | | | | | |

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.

Printed Name

Date & Time

Date & Time

10 L 01

50

101

*** Dissolved Metals and LLHg are field filtered with 0.45 um filter.

 \mathcal{X}

(1) - 3-40mi viais w/ HCI (2) - 11 HDPE w/ HNO3 (3) - 500mi HDPE w/ HNO3 (4) - 500mi HDPE w/ HWEH. (5) - 2-40mi viais w/ HCI (6) - 2-500mi amber glass

Please of D. Kunkel and L. Shea. + J. Flaher hy Comments/Special Instructions

Company:

Company:

Received by

Relinquished by:

(Signature)

Printed Name

(Signature)

Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

Chain of Custody Record & Laboratory Analysis Request

| Ľ | | | , | , | | | | | | | | | | |
|----------|---|--|-------------------|------------|---|------------|--------|-------------|--------------------|--------------------|---------------|----------------|----------------------|--|
| ¥ | AKI Assigned Number: | Turn-around Requested | 1 I | standard | | Date: | 10/7, | 10/7/2009 | | | | | Analytica | Analytical Resources, Incorporated |
| € F 8 | The Boeing Company | ם | Phone: - | | | Page: | 7 | of | 4 | | | | Allalytica 4611 S | Alidiyildal Chemists and Consultants 4611 South 134th Place, Suite 100 |
| 5 | Will Ernst | | | | | No. of | | Cooler | | | | à. | 206-69 | Tukwila, WA 98168 206-695-6200 206-695-6201 (fax) |
| ਹੋਂ | Client Project Name: Plant 2 - 2-31 | Plant 2 - 2-31 Data Gaps Investigation 013-1646-009-200 05 | igation 013 | -1646-009- | 200 05 | | | . 11 | Analysis Requested | uested | | | | Noton Management |
| | Client Project #: | O Charles | | | 50.00 | (, | | | (| - | - | | + | SILLE LINCOLOR SILLE |
| | | Samplers: J. E | J. Bernthal, K. A | , K. Add | ddis | ,8 ε (γ | | (6 | | | | | (81 | |
| | Sample ID | Date | Time | Matrix | No. Containers | SVOCs | PCBs (|) SQT | isnaQ | NO2, NO SO4 (10 | nommA (11) | əbillu2 ——— |) DOT | |
| (a) | Trip Blank (continued from previous page) | 69/11/91 | , |) | 1 | | | | | | | | | |
| <u>Q</u> | 2-31-PL2-5BH-W. B | 10/7/09 | | , | 1 | 7 | > | 7 | 7 | | | 7 | 0) | Continued from p. 1 |
| | | | | | | | | | | | | | + | |
| | | | | | | | | | | | | | | |
| <u></u> | | | | | | | | | | | | | | |
| | | | | | | | | | | | | ····· | | , |
| | | | | | | | | | - | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | - | | | |
| | , | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| C | | | | | | | | | | | | | | |
| Please | Please cc D.Kunkel and L. Shea. + 1. Florer | Relinguished by: | 1 | J. J. | Received by: | | | Relir | Relinquished by: | | | Recei | Received by: | |
| (7) - 4 | -500ml amber place | 4% | 7 . 7 | | Sales | 200 | | (Sign | (Signature) | | | (Signature) | ture) | |
| (8) -2 | 11 HDPE | 大されて | 2 Ha | 5/2/ | 3 | 188 | | Pring | Printed Name: | | | Printe | Printed Name: | |
| (12) | (17) - 500/// LIDPE w/ H2SO4 (12) - 500/// HDPE w/ ₩eeH and Zinc Acetate (13) - 250/// amper alass w/ H2SO4 | TA THE | | | Company: | . \ | | Com | Company: | | | Company: | any: | |
| | | 707 | 169 | 1650 | Date & Time: | ~ | | Date | Date & Time: | | | Date & Time: | Time: | |
| | | | | | \ \ \ \ | | 3 | | | | | | | |

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or Sample Retention Policy: Unless specified by workorder or contract, all water/soil samples submitted to ARI will be discarded or returned, no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer. Sediment samples submitted under PSDDA/PSEP/SMS protocol will be stored frozen for up to one year and then discarded.

2-31 Area Daily Health and Safety Field Book Corrective Measures Study Data Gaps Investigation

Boeing Plant 2 Seattle/Tukwila, Washington Project Number 17511.1

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, Washington 98027 (425) 395-0010

BOEING PLANT 2 7555 EAST MARGINAL WAY SOUTH, SEATTLE, WA

STANDARD WORK PRACTICES

Health and Safety is EVERYONE'S responsibility and NUMBER ONE PRIORITY

- Regulatory compliance is MANDATORY No work will begin and/or work will immediately stop unless the answer to the following question is a positive "YES" – AM I IN COMPLIANCE WITH ALL REGULATORY, FACILITY, PROJECT, AND HEALTH AND SAFETY REQUIREMENTS?
- · All incidents and regulatory inspections must be reported immediately
 - Incident definition: Any event condition, or action (including near misses) that affects the safety of personnel, does not follow rules and guidelines for work implementation and regulatory compliance onsite
- · Incident examples:
 - o Spilled liquid in an uncontrolled environment
 - Working without correct/complete permit in place
 - o Performing hot works without a "Hot Works Permit"

Before starting work, HAVE YOU?:

- Reviewed the Health and Safety Plan prior to performing work?
- Performed a Health and Safety "Tail Gate Meeting" and filled out the sign-in form prior to starting work?
- 3. Reviewed scope of work documents, permits, and other related items prior to performing work?
- 4. Provided correct Personal Protective Equipment (PPE) for the work to be performed?

IF YOU ARE UNSURE OF SAFETY PRACTICES FOR THE PARTICULAR WORK INVOLVED – GET CLARIFICATION PRIOR TO STARTING WORK

Working with subcontractors:

- Review Health and Safety Plan with subcontractor
- Review site "Incident Reporting Procedures"
- Perform "Tail Gate Safety Meeting" with subcontractor

SAFETY AND REGULATORY COMPLIANCE IS MY PRIORITY AND I MUST TAKE THE NECESSARY STEPS TO PROVIDE THIS SERVICE

I AM RESPONSIBLE AND I HAVE THE AUTHORITY TO STOP WORK IF THE TASK DOES NOT MEET THE SAFETY AND REGULATORY REQUIREMENTS

SAFETY DASHBOARD CARD

EMERGENCY AND INCIDENT REPORTING PROCEDURES

EMERGENCY PHONE NUMBER:

(206) 655-2222 Fire, Ambulance, Police, Spill Reporting

SITE ADDRESS:

7555 EAST MARGINAL WAY SOUTH, SEATTLE, WA 98108

WORK LOCATION:

Describe using building number and row/column designation

AN EMERGENCY IS AN UNCONTROLLED SITUATION, AN INJURY THAT IS MAJOR OR LIFE THREATENING. FIRE, OR ANYTHING THAT REQUIRES IMMEDIATE ASSISTANCE.

EMERGENCY REPORTING:

- 1. Contact the PLANT 2 Emergency Response (fire, ambulance, police) at (206) 655-2222
- 2. Follow Incident Reporting procedures listed below

INCIDENT REPORTING:

Respond to the incident and get it under control. Contact the following by e-mail and brief phone

message (MUST DO BOTH):

| Name | Email Address | Phone Number | Position |
|---------------------|-------------------------------|------------------------|------------------------------|
| Joe Flaherty | Joseph.l.flaherty@boeing.com | (206) 769-5987 | Boeing Field Engineer |
| Jennifer Parsons | jennifer.a.parsons@boeing.com | (206) 715-7981 Cell | Boeing Field Engineer |
| Fred Wallace | fred.j.wallace@boeing.com | (206) 930-0461 Cell | Boeing Field Engineer |
| Will Ernst | william.d.ernst@boeing.com | (425) 891-7724 Cell | Boeing Project Manager |
| Ray Power | raymond.t.power@boeing.com | (425) 495-5030 Cell | Boeing Site Focal |
| Ted Norton | tnorton@golder.com | (425) 883-0777 Cell | Consultant Contact |

When leaving the message state the following:

- Date: The date the incident occurred
- 2. Time: The approximate time the incident occurred
- 3. Location: Where the incident occurred, i.e.; Admin Compound...

When send the email include the following:

- Description: Describe briefly what happened and what it may affect
- 2. **Time:** The approximate time the incident occurred
- 3. Location: Where the incident occurred, i.e.; Admin Compound...
- 4. Description: Describe briefly what happened and what it may affect

After the incident is under control, the sequence of events will be recorded, including probable cause, people who responded to the incident, the extents of the incident, and relevant dates and times

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

SIGNATURE PAGE

| Name (Print) | Signature | Date Comp | any/Affiliation |
|------------------|--|-----------|-----------------|
| Kristin Addis | Kyst J. Alls | 8/24/09 | EPI |
| Doug Kunkel | Dofos 9linkel | 8/24/09 | EPI |
| Ted Norton . | luflata | 8/24/09 | GAZ |
| Kerry Lamphen | They lype | 8-24-09 | CITT |
| - Andy Magh | | - 8-24-09 | COL |
| Jeremiah Jenkins | Deceman Jun | 28-74-1 | 4 (OI |
| Jed L. SAGOR | 1 / DICL | 6-24- | 07 6016 |
|) Ill ambert | Jul four G | 8-24-09 | - |
| Michael Lumpkin | Mighen Jang | h 9-24-09 | _ |
| Joe Flaherty | Ja Jellet | 8-24-09 | Boeing |
| Eric Holliday | Everth J. | 8-24-09 | |
| Josh Burth | 1/10 7607 | 8/31/09 | EPT |
| Jill Lamberts | Jul famille | 8/3//99 | _6AI |
| 1ed Sayl | 1 1 1 2 Su | 8/3/109 | Golder |
| DALKON 18 | | 8-31-09 | |
| Eligh Floyd | Blin Floy | 8-31-09 | Cascade |
| Joe Haberty | Jef) (9) | 8.31-09 | Boeing |
| Joe Flaherty | The falls | 9-1-09 | Boeing |
| SACKEON Key | 111 | | <u> </u> |
| Eligh Hoyd | Ret Hoyd | 9-1-09 | COI |
| Jed Sager | 100 Doo | 0-1-09 | 6. Her |
| Jill Canbort | HULLU TO | 9.1-09 | GAL |
| Josh Benthal | X and the state of | 9-1-69 | Golder |
| J.11 Camberts | flythe | 7-2-09 | GOIARN |

Attachment C. Ineath & Safety Plan for 2-01 Area Cata Gap investigation Society Frant 2, Seattle Tyresta, Visioningson April 2009

SIGNATURE PAGE

I have read this Health and Safety Plan and understand its contents. I governor to the second and safety Officer (Josh Beroto, Fr. 1997) designated alternate if she conditions or hazards not specifically designated here.

| Name (Print) | Signature | | Company/Affiliation |
|--------------------|----------------|--|---------------------|
| Steve Stivess | H H | 8-25-09 | CUT |
| Kerry Lumphens | Thy Tylu- | 8-25-09 | COD |
| Andy Flagan | JAN. J. | - 8-25-09 | CDI |
| J.11 Lamberts | Jeffanh | 8-25-09 | Golder |
| Ted Sages | July Sur | 8-25-09 | Gelder |
| Kristin Addis | Kepst of Addis | AND THE PROPERTY OF THE PROPER | EPI |
| JACKSANX; | A AN " | FY-2-6 | of CV |
| Josh Barand | JUBO | 9/2/09 | EPI |
| Jos Flater | 4 | 9/2/09 | Been |
| Ted L. Sager | 1 Little | 9/2/09 | 661de |
| Elijoh Flyd | CK Floyd | 9/2/09 | COI |
|) Humberts | Julioul Z | 9/3/09 | GAI |
| Josh Beath | | 9/3/09 | <u>FP</u> |
| 1ed Sager | 10 July | 9/3/9 | Golles |
| Elija Floyd | Sixt-Played | 9/3/09 | CPI · Co |
| JAEVER Key | | 9-3-09 | |
| Joe Flaherty | The In | 9-3-09 | Boeing |
| Kristin Addis | Kint J. Heldis | 9-8-09 | EPT (DI |
| Lasy Gell | | 9-8/09 | |
| LANN GOBER | Lypf Zuhle | 9-8-09 | CDJ. |
| JANSIN RC | | 9-8-69 | C01 |
| - 34 KYN KPY | AND IN | 9-8-09 | $\frac{C}{C}$ |
| Call I and the | July IV | | GAT |
| - XIII Larriber 13 | · Hutenver | 9-9-09 | GAI |
| | | | |

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

SIGNATURE PAGE

| Name (Print) | Signature | Date Company/Affiliation | |
|-------------------------|--------------|----------------------------|------------------|
| Kristin Addis | Krist J Adde | , 8/27/09 EPI | |
| Garret Harrington | That forth | 127/09 NWC | concrete cutting |
| Eligh Flag of Ted Sager | Six Flad | 9/8/09 /9/9/09 9/8/09 | |
| Ted Sager | The Islan | 0/9/09 | |
| Joe Flakety | Jo la | 9/8/09 Bein | 7 |
| Ja Habry Just Re Mhl | Jan D | 9/9/09 Boe | ? |
| Josh Berty | 11 | 9/9/09 64 | \mathcal{L} |
| Julyenler | Jellyely | 9/10/09 GAT | |
| Illjamhects | Jul feml | 2 9/11/09 GAJ | |
| Ted Sano | 1 Charles | 9/10/04 GAI 9/11/09 GAZ | |
| Toch Benth | - AND | 7 9/16/09 EPI | |
| John Brown | | & g/11/01 EPT | |
| SACUGUN KAY | | 9-10-09 (0) | _ |
| VACKEW KNO | | | |
| Elisa Haza | The Floyd | 9-11-09 CDI 9-14-09 GAI | |
| Josh Beinhl | 1 A Tank | 9-14-09 EPI | |
| 18 Jed Sager | 1 hill | 9-14-09 GAZ | • |
| Elijah Floyd | They Hoyd | 9-14-09 CDE | |
| JITCKON KON | - M/ | 4/6/09 00 | |
| JULJembetz | / Il Camber | k 9/15/09 GAZ | |

SIGNATURE PAGE

| | <i>f</i> : // | <i>[</i>] | |
|------------------|------------------|------------|---------------------|
| Name (Print) | Signature | Date | Company/Affiliation |
| Ald SAGUR | / halfkhr | 4/15/09 | GAI |
| JACKSUM 1/54 | | 9-15 | -09 (4)(AB |
| Elight Floyd | the to long | 9115-09 | COI |
| Jennifer Parsons | Jennifer Gereson | 4 9-15-09 | BOEING, |
| Josh Beingh | MARC | 9-15-09 | EPZ |
| Jill Leimberts | Julia 2 | 9.16.09 | GAZ |
| Tel Sage | My Dely | 9-16-0 | 9 GHI |
| tosh Beinthl | A B | 7 9/16/1 | 9 EPI |
| 1 JACKSON KWY | | 9/16/09 | CD In |
| Elich France | Estate, d | 9/16/09 | CPI |
| Ted Sager | 1 Holy | 3/17/09 | GAI |
| 1) simberts | Jul Jante | 9/17/09 | GAI |
| Josh Bornel | Mr 150 | 9/17/09 | EP2 |
| JACKIMEN , | | 9-17- | -ce (a) |
| · Lumberts | Jul Parily | 9/22/09 | GM |
| J. Limbouts | Illey / | 9/24/07 | GAZ |
| 500ger/ | 1 / Le Ley | 9/24/0 | 9 GAF |
| Barry | MIRE | -9/29/k | i SPI |
| 14 CK SUN K RI | | - V | 1001 CD1 |
| Elijoh Floyd | Entloyd | 9/24/ | 1 |
| Joe Flaurty | de de | 7/24/ | 109 Bueny |
| Jill Camberts | gul tempt | 2 6/110 | |
| Jul amberts | Ju Fare S | 3 10/40 | |
| Kristi- Addis | Met LAdd | 10/1/ | 109 EPI |

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

SIGNATURE PAGE

| Name (Print) | Signature | Date | Company/Affiliation |
|--|--|--------|---------------------|
| Kristin Addis J. Lamberts Kristin Addis J. Lamberts Kristin Addis Tat Bontal | Just of Adda Just of Adda Just of Adda Just of Adda | 10/8 | 5/09 EPI |
| Kristin Addis | Kish I /6 | Hdis 1 | 0/8/09 EPI |
| | | | |
| | | | |



Attachment C: Health and Safety Plan for 2-31 Area Data Gap Investigation

Boeing Plant 2 Seattle/Tukwila, Washington

Prepared For:

The Boeing Company P.O. Box 3707 M/C 1W-12 Seattle/Tukwila, WA 98124

April 2009 – Revised September 2009

Prepared By:

Environmental Partners, Inc. 295 NE Gilman Blvd. Suite 201 Issaquah, WA 98027 (425) 395-0010

Douglas C. Kunkel L.G., L.H.G.

Principal Hydrogeologist

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009 – Revised September 2009

| BO | CIN | | 00 | LIT | ٠.٨ | ^1 | rc |
|----|-----|----|----|------|-----|----|----|
| ВU | | (3 | LU | IV I | м | u | |

 Jennifer Parsons:
 (206) 715-7981 (cell)

 Will Ernst:
 (425) 891-7724 (cell)

 Mike Gleason:
 (206) 290-6576

EPI CONTACTS

GOLDER CONTACT

EMERGENCY CONTACTS AND EMERGENCY INFORMATION

In the event of an emergency, be prepared to give the following information:

Location of Emergency

Site Location: The Boeing Company

7755 East Marginal Way South Seattle, Washington 98108

Landmarks: West of Boeing Field and East of the

Duwamish Waterway

Nearest Cross Street: South of 16th Ave South

- Phone Number That You Are Calling From: LOOK ON PHONE
- What Happened?
 - * Type of Accident
 - * Type(s) of Injuries
- How Many People Need Help?

Additional Emergency Information:

Hospital Name: Harborview Medical Center

City, State, Zip Code: Seattle, Washington 98104

Phone Number: (206) 731-3000

Contact a Principal at Environmental Partners, Inc. after Emergency Services have been called.

Environmental Partners, Inc. (425) 395-0010 (office)

Doug Kunkel (Principal) (425) 241-8170 (cell)

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009 – Revised September 2009

1.0 PLAN OBJECTIVES AND APPLICABILITY

This Health and Safety Plan has been written to comply with the standards prescribed by the Occupational Safety and Health Act (OSHA) and the Washington Industrial Safety and Health Act (WISHA).

The purpose of this health and safety plan is to establish protection standards and mandatory safe practices and procedures for all personnel involved with field activities associated with the 2-31 Area Data Gap Investigation at the Boeing Plant 2. This plan assigns responsibilities, establishes standard operating procedures, and provides for contingencies that may occur during field activities. The plan consists of site and facility descriptions, a summary of work activities, an identification and evaluation of chemical and physical hazards, monitoring procedures, personnel responsibilities, a description of site zones, decontamination and disposal practices, emergency procedures, and administrative requirements.

Mr. Josh Bernthal, of Environmental Partners, Inc. (EPI) is the designated Site Health and Safety Officer. Mr. Doug Kunkel and Mr. Ted Norton are designated as alternate Site Health and Safety Officers. As Site Health and Safety Officer, Mr. Bernthal has total responsibility for ensuring that the provisions outlined herein adequately protect worker health and safety and that the procedures outlined by this Health and Safety Plan are properly implemented. In this capacity, Mr. Bernthal will conduct ongoing oversight and site inspections to ensure that this Health and Safety Plan remains current with potentially changing site conditions. Mr. Bernthal has the authority to make health and safety decisions that may not be specifically outlined in this plan, should site conditions warrant such actions. In the event that Mr. Bernthal leaves the site while work is in progress, an alternate Site Health and Safety Officer will be designated.

The provisions and procedures outlined by this Health and Safety Plan apply to all contractors, subcontractors, owner's representatives, oversight personnel, and any other persons involved with the field activities described herein. All such persons are required to read this Health and Safety Plan and indicate that they understand its contents by signing the Site Health and Safety Officer's copy of the Plan. In addition, all such persons are required to provide documentation of their current certification under Occupational Safety and Health Administration's (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation, 29 CFR 1910.120. Copies of this Health and Safety Plan have been distributed to a designated representative of the following companies and/or organizations:

The Boeing Company

It should be noted that this Health and Safety Plan is based on information that was available as of the date indicated on the Title Page. It is possible that additional hazards that are not specifically addressed by this Health and Safety Plan may exist at the work-site, or may be created as a result of on-site activities. It is EPI's firm belief that active participation in health and safety procedures and acute awareness of on-site conditions by all site workers is crucial to the health and safety of everyone involved. If you identify a site condition that is not addressed by this Health and Safety Plan, or if you have any questions or concerns about site conditions or this Plan, immediately notify the Site Health and Safety Officer.

3.0 HAZARD EVALUATION AND RISK ANALYSIS

In general, there are three broad hazard categories that may be encountered during site work; Chemical Exposure Hazards, Fire/Explosion Hazards, and Physical Hazards. Subsections 3.1 through 3.3 address specific hazards falling within each of these broad categories.

3.1 Chemical Exposure Hazards

Table 1 presents chemical-specific data regarding permissible exposure levels (PELs), likely pathways of exposure, target organs that will likely be affected by exposure, and likely symptoms of exposure for hazardous substances that are potentially present at the site. Table 1 data were compiled from the NIOSH Pocket Guide to Chemical Hazards, September 2007 edition. It should be noted that the PELs are the regulated limits; Recommended Exposure Limits (RELs) by NIOSH are guidance but are listed as a reference.

Table 1: Chemical-Specific Exposure Data

| Chemical Name | REL* | PEL* | IDLH* | Exposure Route | Target Organs | Symptoms |
|---|--------------------------------|----------------------------|-----------------------|---|--|---|
| Aroclor (1242) [CAS 53469-21- 9] | NE | NE | NE | See Total PCB | See Total PCB | See Total PCB |
| Aroclor (1248) [CAS 12672-29-6] | NE | NE | NE | See Total PCB | See Total PCB | See Total PCB |
| Aroclor (1254] [CAS 11097-69- 1]] | NE | NE | NE | See Total PCB | See Total PCB | See Total PCB |
| Arsenic (elemental) [CAS 7440-38-2] | 0.002 mg/m ³ | 0.010 mg/m ³ | 5 mg/m³ | Inhalation; ingestion; skin/eye contact | Skin; respiratory system; kidneys; central nervous system; liver; GI tract; respiratory system | Irritation of skin; dermatitis; respiratory distress; diarrhea; kidney damage; muscle tremor; convulsions; GI tract; reproductive effects; lover damage |
| Benzo(a)anthrace ne [CAS 56-55-3] | NE | NE | NE | | | |
| Benzo(a)pyrene (coal tar pitch volatiles) [CAS 50-32-8] | 0.1 mg/m ³ | 0.2 mg/m ³ | 80 mg/m ³ | Inhalation; skin/eye contact | Skin; respiratory system; bladder, kidneys. | Dermatitis; bronchitis. |
| Benzo(b)fluoranth ene (coal tar pitch volatiles) [CAS 205-99-2)] | 0.1 mg/m ³ | 0.2 mg/m ³ | 80 mg/m ³ | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) |
| Benzo(k)fluoranth ene (coal tar pitch volatiles) [CAS 207-08-9] | NE | NE | NE | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) |
| Cadmium (dust) [CAS 7440-43-9] | Lowest possible exposure | 0.005 mg/m ³ | 9 mg/m ³ | Inhalation; ingestion | Respiratory system, kidneys, prostate, blood | Pulmonary edema, dyspnea, cough, chest tightness, substernal pain, headache, chills, muscular aches, nausea, vomiting, diarrhea, anosmia, emphysema, proteinuria, mild anemia |
| Chrysene [CAS 218-01-9] (1,2- benzphenanthrac ene) | NE | NE | NE | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) | See Benzo(a)pyrene (coal tar pitch volatiles) |
| Copper (dust) [CAS 7440-5-8] | 1 mg/m ³ | 1 mg/m ³ | 100 mg/m ³ | Inhalation; ingestion; skin/eye contact | Eyes, skin, respiratory system, liver, kidneys | Irritation of eyes, nose and pharynx, nasal septum perforation, metallic taste, dermatitis. |

3.3 Physical Hazards

Following is a summary of a variety of physical hazards that may be encountered on the job-site. For convenience, these hazards have been categorized into several general groupings and suggested preventative measures are also included.

Two of the soil-boring locations, 2-31-DP-13 and 2-31-DP-14, are located within a public roadway and the services of a traffic control subcontractor will be used to protect worker safety. Traffic flaggers will be onsite during the work at these two locations to manage and control traffic. A Traffic Control Plan is attached to the end of this Health and Safety Plan.

| Category | Cause | Prevention |
|--------------------|---|---|
| Head Hazards | Falling and/or sharp objects, bumping hazards. | Hard hats will be worn by all personnel at all times when overhead hazards are present. |
| Foot/Ankle Hazards | Sharp objects, dropped objects, uneven and/or slippery surfaces, chemical exposure | Chemical resistant, steel-toed boots must be worn at all times on-site. |
| Eye Hazards | Sharp objects, poor lighting, bright lights (welding equipment), exposure due to splashes | Safety glasses/face shields will be worn when appropriate. Shaded welding protection will be worn when appropriate. |
| Electrical Hazards | Underground utilities, overhead utilities | Locator service mark-outs, visual inspection of work area prior to starting work. |
| Mechanical Hazards | Heavy equipment such as drill rigs, service trucks, excavation equipment, saws, drills, etc. | Competent operators, backup alarms, regular maintenance, daily mechanical checks, proper guards. |
| Noise Hazards | Machinery creating >85 decibels TWA, >115 decibels continuous noise, or peak at >140 decibels | Wear earplugs or protective ear muffs when appropriate. |
| Fall Hazards | Elevated and/or slippery or uneven surfaces. Trips caused by poor "housekeeping" practices | Care should be used to avoid such accidents and to maintain good "housekeeping". Fall protection devices must be used when work proceeds on elevated surfaces. |
| Lifting Hazards | Injury due to improper lifting techniques, overreaching/overextending, heavy objects | Use proper lifting techniques, mechanical devices where appropriate. |
| Lighting Accidents | Due to improper illumination | Work will proceed during daylight hours only, or under sufficient artificial illumination. |
| Traffic Hazards | Two soil borings located in active roadway | Use flaggers provided by traffic control subcontractor to manage traffic. Wear orange safety vest, be aware of surroundings, and look both ways before walking. |

4.1.2 Action Levels

Photoionization Detector (PID)

| Response | Length of Time | Protective Measure |
|------------------------|---------------------------|---|
| < 5 ppm | 15 minute average | Level D PPE |
| >1 ppm over background | 15 minute average | Evaluate vinyl chloride concentrations relative to total VOCs using colorimetric tubes |
| 5-25 ppm | 15 minute average | Allow work area to vent. If persistent: Level C |
| 25-50 ppm | Sustained over 15 minutes | Level C PPE, High-efficiency organic vapor cartridges in respirator |
| > 50 ppm | One (1) minute average | Vacate work area, notify Site Health and Safety Officer or designated alternate immediately |

It should be noted that these action levels are based on the presence of benzene and vinyl chloride which have the lowest PELs and STELs of the compounds listed in Table 1.

4.2 Site Monitoring

The Site Health and Safety Officer will visually inspect the work-site at least daily to identify whether any new potential hazards have arisen. If and whenever possible, immediate measures will be taken to eliminate, or reduce the risks associated with these hazards.

4.3 Personal Protective Equipment (PPE)

It is anticipated that all field tasks will be performed in Level D PPE unless additional PPE is required because of task or site-specific upgrades. Level D PPE includes the following items:

- Nitrile inner and outer gloves
- Steel toe, steel shank work boots. Neoprene steel-toe, steel shank boots for ground water sampling and for drilling below the water table
- Hearing protection during drilling activities
- · Hard hat during drilling activities and excavation work
- · Safety glasses
- Cotton or Tyvek coveralls required
- · Orange safety vest when working in or near roadway

Level C PPE includes all Level D items plus the following:

- Full-face respirator equipped with organic vapor/HEPA combination cartridges (full face respirator replaces safety glasses for eye protection),
- · Tyvek or Saranex coveralls
- Neoprene steel-toe, steel shank boots

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009 – Revised September 2009

6.0 SITE CONTROL

The following section identifies several activity zones located on the work-site. It should be noted that access to some of these activity zones (i.e. the exclusion zone) will be restricted to designated personnel.

The work site is secured. Pedestrians and other unauthorized personnel will not be allowed within the exclusion zone.

6.1 Contamination Reduction Zone

A specified area will be established for the decontamination of sampling equipment and personnel. Because the location of this zone will change during the course of the investigation the site safety office will discuss the contaminant reduction zone location during each daily safety briefing.

6.1.1 Decontamination Procedures - Equipment

Split-spoon samplers and other down-hole equipment will be decontaminated with a solution of Liquinox™ or equivalent soap and potable water and rinsed with distilled or deionized water prior to collecting soil samples for analysis as noted in Section 3.8.2 of the work plan. An alternative method of decontamination is to hot water pressure wash all down-hole sampling and drilling equipment. All decontamination wastes will be containerized, properly marked, and left in a designated on-site location for disposition by Boeing.

6.1.2 Decontamination Procedures - Personnel

All personal protective clothing (i.e. nitrile gloves) and other miscellaneous waste will be bagged in opaque garbage bags and will be discarded in the trash. All on-site personnel must, at a minimum, wash their face and hands before eating, before break periods, and prior to leaving the site as noted in Section 3.8.3 of the work plan.

Page 11

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009 – Revised September 2009

8.0 ADMINISTRATIVE

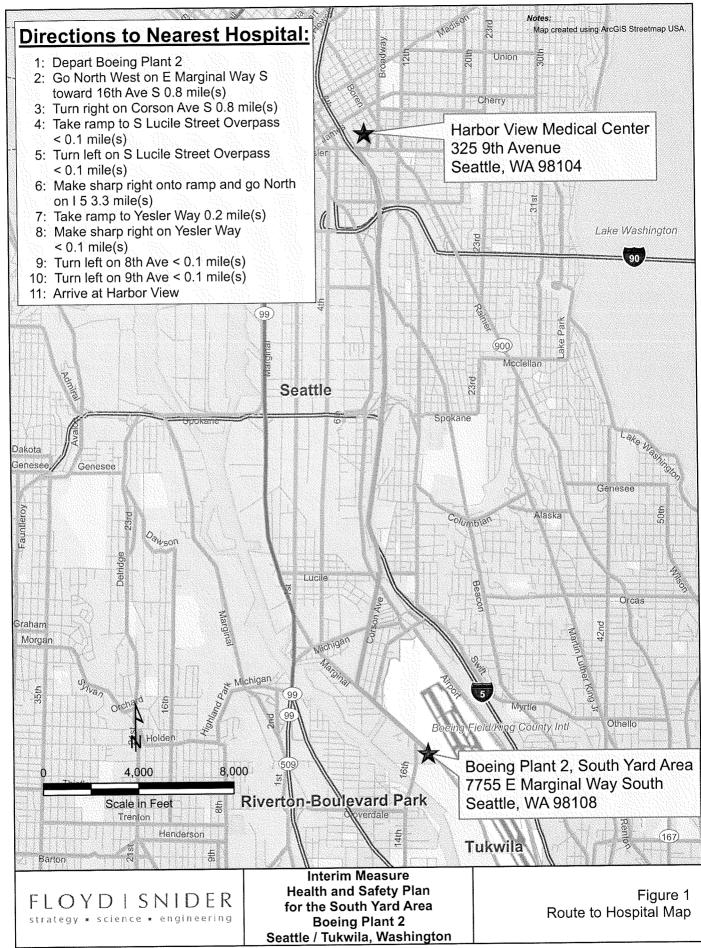
8.1 Medical Surveillance

Personnel involved with field activities must be covered under their employer's medical surveillance program that includes annual physical examinations and certification to wear respiratory protective equipment. These medical monitoring programs must be in compliance with all applicable worker health and safety regulations.

8.2 Record Keeping

The Site Health and Safety Officer, or a designated alternate, will be responsible for keeping daily logs of workers and visitors present at the work site, attendance lists of personnel present at site health and safety meetings, accident reports, air monitoring results, and signatures of all personnel who have read this Health and Safety Plan.

Figures





UTILITY PERMIT

Permit No.:

97212

PERMITTEE

Inspector: David Soule Inspection District: INDUSTRIAL

Application Date:

9/2/09 1:45 pm

Issue Date:

9/10/09 3:18 pm

Address: 7755 EAST MARGINAL WAY S

Details: (2)(2") TEST BORES IN THE SOUTH-BOUND CURB LANE OF E MARGINAL WAY S.

PARTIES (* Primary Applicant)

| Role | Name | Address | Phone | From | То |
|------------------|-------------------|---|---------------|------|----|
| *24 Hour Contact | TED, NORTON | 18300 NE UNION HILL RD,,REDMOND,WA,98052 | (206)755-4970 | | |
| Permittee | GOLDER ASSOCIATES | 18300 NE UNION HILL RD STE #200,,REDMOND,WA,98052-3333 | (425)883-0777 | | |

PERMITTED USES

LOCATION

| Right of Way: ARTERIAL | | NAL | DPD#: | | То Ве | To Be Restored By: PERMITTEE | | |
|------------------------|--|------------|----------|------------------|-----------|------------------------------|----------------------|--|
| Use | Space | Start Date | Duration | Max Allowed Date | Sq. Ft. | Issued Date | Intended Vacate Date | |
| 511 | Α | 9/21/09 | 10 | 9/30/09 | 330 | 9/10/09 | 9/30/09 | |
| Use Spa | ce Descrip | tion | | | Condition | ons | | |
| 51I A | A Preparatory and exploratory work for upcoming projects, including surveying, installing monitoring wells, and soil sampling. | | | | | | | |

CONDITIONS OF USE

ADDITIONAL CONDITIONS:

Additional Notes: (2)(2") Test Bores in the South-bound curb lane of E Marginal Way S.

ARTERIAL PERMIT: ARTERIAL STREETS shall be open to its full driving width between the hours of 7-9:00am and 4-6:00pm weekdays. At all other times it may be reduced to one lane in each direction. Permittee shall contact. King County/METRO Transit (684-2732) five days prior to starting any work which may affect bus stop zones or other bus operations. Maintain a 4-foot wide walkway for pedestrians around the work area. Permittee shall contact all residents who may be affected by this work at least 72 hours before the start of work. A minimum of one week's advance notice shall be given by permittee to the affected businesses/residents when driveway or delivery access will be restricted. Access to all businesses shall be maintained during construction. All driveways will be cleared and accessible at the end of every work day. Permittee is responsible to have parking restriction easels up a minimum of 24 hours in advance of the need to clear parking within the construction zone. Parking restriction easels must show either the permittee's or contractor's name and phone number. Permittee shall coordinate this work with any other contractors working near its work zone to avoid conflicts. Tree roots 2" or more in diameter shall not be cut or damaged. Permittee shall contact the City Arborist Office (684-7649) a minimum of two working-days prior to diaging within the "drip line" of any street trees.

No permanent restoration of street or alley pavement shall be done by permittee or its contractor until a City of Seattle/Seattle Transportation-Street Use inspector has marked the periphery of the pavement to be repaired and/or replaced.

Seattle Dept of Transportation Street Use Permits, 23rd Floor 700 Fifth Ave, Suite 2300 P O Box 34996 Seattle, WA 98124-4996

UTILITY PERMIT

Permit No.: 97212

4. Superiority of street improvement contracts. Rights acquired under this permit are inferior to those acquired under existing or future street improvement contracts.

- 5. Compliance with technical requirements and standards. All work within the public right-of-way must be performed and completed in accordance with requirements set forth in the following technical documents published by the City of Seattle, as now or hereafter amended: Right-of-Way Improvements Manual; Standard Specifications for Road, Bridge, and Municipal Construction; Street and Sidewalk Payement Opening and Restoration Rule; and Traffic Control Manual for In-Street Work.
- 6. Scope of Work. The Permittee shall construct the improvements reflected in, and in accordance with, this permit and the City approved construction plans. Any and all revisions, omissions and / or additions to the scope of work shall be reviewed and approved by the City prior to implementation.
- 7. Notification prior to starting work. Permittee shall be responsible for notifying Street Use Job Start at (206) 684-5270 or SDOTJobStart@Seattle.gov twenty-four (24) to seventy-two (72) hours prior to the start of work and provide the following information:
 - · Permit Number
 - · Job Site Address
 - · · Start Date
 - · Brief Work Description
 - · Job Site Contact Name and Phone Number

Failure to do so will result in a penalty of \$300, or such other amount as may be established pursuant to SMC 15.04.074.

- 8. Coordination of work. In performing work authorized by this permit, the Permittee shall coordinate with other contractors working in the public right-of-way to minimize the impact to the public.
- 9. Hours of work. Work performed within the public right of way shall occur only during hours authorized under the City of Seattle Noise Control ordinance, codified at Chapter 25.08 SMC, and the Traffic Control Manual for In-Street Work, as now or hereafter amended.
- 10. Inspection fees. Permittee shall pay for city inspections of work authorized under this permit at a rate of \$150 per hour, or such other amount as may be established pursuant to SMC 15.04.074, and to cover all other associated costs.
- 11. Billing. All fees and costs billed pursuant to this permit shall be paid to the City of Seattle within thirty (30) days from the date of the invoice. Any invoice more than ninety (90) days past due will be forwarded for collection. All past due amounts will accrue interest at twelve (12) percent per annum. In the event suit is commenced to collect on unpaid invoices, the prevailing party will be entitled to reasonable attorney fees and costs of litigation.
- 12. Deposits, Charges, and Future Billings. The Permittee is responsible for all permit charges. If a deposit was made for estimated future street use services, any unused portion of the deposit will be refunded to the Permittee. Any charges in excess of the deposit will be billed to the Permittee.
- 13. Indemnification. The Permittee agrees to defend, indemnify, and hold harmless the City of Seattle, its officials, officers, employees, and agents against: (1) any liability, claims, causes of action, judgments, or expenses, including reasonable attorney fees, resulting directly or indirectly from any act or omission of the Permittee, its contractors, subcontractors, anyone directly or indirectly employed by them, and anyone for whose acts or omissions they may be liable, arising out of the Permittee's use or occupancy of the public right-of-way; and (2) all loss by the failure of the Permittee to fully or adequately perform, in any respect, all authorizations or obligations under this Permit.

EXISTING IMPROVEMENTS

- 1. Costs of damage to city property and improvements. Permittee shall be responsible for the costs of repairing any damage to city property or improvements resulting from work performed by or on behalf of the permittee within the public right-of-way.
- 2. Utility protection. The Permittee shall be responsible for checking locations and providing adequate protection for all utilities in the work area.
- 3. Notification prior to ground disturbance. The Permittee shall call Utility Underground Locator Center (1-800-424-5555) a minimum of 48 hours prior to ground disturbance.
- 4. Utility relocation. Any necessary utility relocation shall be at the expense of the Permittee, who shall be responsible for notifying affected utilities and requesting the service relocation.
- 5. Survey monuments. Prior to removing, destroying, disturbing, or covering a survey monument, such that the survey point is no longer visible or readily accessible, Permittee shall obtain a permit from the Department of Natural Resources pursuant to Washington Administrative Code, Chapter 332-120.

RESTORATION

- 1. Full and continuous restoration. The public right-of-way shall be left in original or better condition, continuous with work progress.
- 2. Environmental protection.
 - 2.1 Best management practices required. The Permittee shall be responsible for the control of surface runoff, erosion and sediment at the construction site, as required by: the Stormwater code (Title 22 Subtitle VIII SMC), the Standard Specifications for Road, Bridge, and Municipal Construction and Department of Planning and Development Director's Rule 16-2000, as now or hereafter amended. The site and the surrounding area shall generally be kept clean and free of construction debris or other material, including but not limited to mud, dust, rock, asphalt, and concrete. Waste materials shall be collected and disposed of at an appropriate disposal site. These materials shall be prevented from entering any part of the public sewer and storm drain system, and any surface waters.

TRAFFIC CONTROL REQUIREMENTS





City of Seattle
Seattle Department of Transportation
Street Use Division
700 Fifth Avenue, Suite 2300
Seattle, Washington 98104-5043

| | S | treet Use Permit (| Checklist a | nd Revi | iew Transmittal |
|---|--|---|---|--|---|
| Project Location: 7755 | Ea | st Marg | mas l | lby | 15- |
| FROM: SDOT, Street Use Division Phone No. (206) 684-52 Email Address: sdotperr | 83 Fax | No. (206) 684-5347 | | | pplication Acceptance Date: 09/62/09 RECEIVED |
| If comments are due sooner than | 10 bus | iness days, please s | pecify the rea | son for t | |
| APPLICATION COMP ENTER APPLICATION STREET CLASSIFICA MOBILITY IMPACTS FOR NON-ARTERIAL GIS SPECIAL CONDIT PLAN CHECK (CHECK PLANS COMPLETE - INCLUDE: SITE PLAN - T TCP - TITLE, P RESTORATION STAGE PROGRESS TO COLLECT DEPOSIT COMPLETED R | N INFO TION ARE O STRE TIONS CK AL VERIF ITLE, ERMIT N PLA O APPI OR EVIEW APPL | DRMATION INTO CORRECT A CORRECT BASEL ETS - ENTER MO CHECK - ENTER IT THAT ARE RI TY INFORMATIO PERMIT NUMBE IT NUMBER, HOU N - REQUIREME LICATION PRO BILLING W CHECKLIST FO ICATION SUBMI | ON-LINE O HANSEN ARTERIAL O ON SITE OBILITY IN RENDORS EQUIRED IN IS COME OR, WORK ORS OF WO ENTS PER U CESSED IN | PERMI PLAN IN THI PLETE ZONE I ORK, CO JSE CO N HANS | S INTO HANSEN IS INTO HANSEN BASD ON GIS E REVIEW BOX BELOW) ON REQUIRED PLANS. ITEMS MAY LOCATION AND DIMENSIONS ONTACT INFORMATION DDE AND PROJECT LOCATION SEN |
| | | PERMIT PLAI | | CHECI | KEIST |
| PLANS | RQ' D | REVIEWER | CTRCD | ATE | DUE DATE APPROD DENIED DATE |
| SITE PLAN / FIELD REVIEW | | We | 09/02 | 87 | 050000 00000 |
| TCP | W | M. Vancil | 09/04 | de 1 | 09/12/19/9/ 9/3/05 |
| RESTORATION PLAN | | | | | |
| OTHER: | | | | | |
| OTHER: | | | | | |
| PERMIT REVIEW CO PAPPLICANT NOTIFIE 96608 | | ETE INITIALS DAT | | <u>la</u> | INITIALS: |

| WORK DESCRIPTION (continued | 2 | | |
|--|--|--|--|
| DETAILED DESCRIPTION (Please | | | |
| Drill and Sumpa | | | to 14-feet below |
| , a | and collect gro | und water Sa | mples for |
| environ mental | investigations | 177 18/2 WAS | by licensed driller |
| IMPACTED INFRASTRUCTURE | Wheek all that apply) | 113700 WHC | July Tidased (1) 111-5 |
| | Asphalt Street | ☐ Concrete Street | ☐ Curb and Gutter |
| ☐ Alley | ☐ Paved Shoulder | ☐ Planting Strip | ☐ Sidewalk |
| Curb Ramp | . <u>—</u> | ☐ Unimproved ROW | ☐ Unpaved Shoulder |
| ☐ Traffic Circle | ☐ Trees | Other ROW | - Onpaved Chodidor |
| ☐ Utility Structures | ☐ No Impact | | |
| REODE ITY IMPACT VOICE - Walnut on | | Other ROW | |
| MOBILITY IMPACT (Check all that ap | Alley Partially Blocked | ☐ Bike Lane Closed | ☐ Bike Lane Partially Blocked |
| ☐ Alley Closed | - | ☐ Sidewalk Closed | ☐ Sidewalk Partially Blocked |
| ☐ Multi-Travel Lanes Closed | Parking Lane Closed | | _ Sidewalk Faritally blooked |
| ☐ Street Closed | Travel Lane Closed | ☐ No Impact | |
| TERMS Indemnification | · | | , |
| of Transportation, Street Use Division. and all applicable requirements of stat made, otherwise the application shall I Applicant or Authorized Agent State I declare under penalty of perjury under owner; that the information provided he Deposits Charges, and Future Billia | ditions, and requirements of the pe Permittee further agrees to compe and federal law. Work shall begoe void. The ement er the laws of the State of Washing erein is correct and complete; and the state of the stat | bly with all applicable city ording in within six months from the control of that: I am the Applicant All that I have the authority to bir the for estimated future Street Uses in the street Use for estimated future Street Uses in the street | them to the satisfaction of the Seattle Departmenances, including but not limited to Title 15 SMC date of approval unless other arrangements are ND the Owner OR the authorized agent of the nd the owner to this application. Use services, any unused portion of the deposit |
| APPLICANT SIGNATURE: | | | DATE: |
| | the section of the se | Official Use) 法股份 | |
| REQUIRED AT APPLICATION | REQUIRED PRIOR TO IS | | ijum Waiver * 12 Ravement Moratorium W |
| ☐Site Plan | ☐ Annual Permit ☐ BIA Approval | ⊞HolidayiMorator ⊠illidaminityiAgree | |
| Restoration Plan Traffic Control Plan | ☐)Bond | Noise Exemplio | |
| Deposit: \$ | Historic District Approve | | |
| COMMENTS: | | | |
| | The state of the s | 4 | |
| 200 19 200 19 200 19 200 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 19 20 1 200 200 200 200 200 200 200 200 200 200 | The state of the s | | |
| | | District Control of the Control of t | |
| APPLICATION ACCEPTED BY: | Total Commence of the Commence | energia de la composition della composition dell | DATE: |
| APPLICATION APPROVED BY | | San Eddinardona, Lan | CONTEXT OF THE PROPERTY OF THE |

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009 – Revised September 2009

SIGNATURE PAGE

| Name (Print) | Signature | Date | Company/Affiliation |
|-------------------|----------------|-----------|---------------------|
| Vill Campents | Melfemby | 9/2/109 | GAI |
| Knistin Addis | Kirty J. Hodis | 9/21/69 | EPI |
| 1ed Sager | hux Says | 9/21/09 | GAT |
| Josh BerMy | 1150 |) 9/z1/01 | EPI |
| Joe Flaherty | H-Alu | 9/21/09 | Boeing |
| JACKEN MY | | - | 9 CDÍ |
| Elijah Floyd | Elf Floyd | 1 9-21-09 | CDI |
| Garret Harrington | Burt Hair |) 9-2(- | 09, NWCC |
| | / | | |
| | | | |
| | W DV | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | 8/12/2009 2-31 Data Gaps 013-1646009.20005 |
|----|---|
| | - J. Lamberts |
| | 8am - onsite w K. Addis, D. Kunke & J. Parsons, |
| | T. Norton to do walk through of 2-31 |
| | Site Locations |
| | · HII notes are on spreadsheet of logations |
| | provided by T. Norton. |
| | 1030pm offsite |
| • | 10 10/11 0/7 0000 |
| · | Jel |
| | 8/19/2009 2-31 Data Gaps 013-1646.009.05 |
| *. | 8/19/2009 2-31 Data Gaps 013-1646.009.05 |
| | 1130 am - unsite & K. Addis, J. Flaherty to do |
| | walle through of 2-3/ locations for |
| | utility locates. |
| | |
| | 2-31-DP-46 7 moved 2'SW from original loc. |
| | 2-31-0P-44 > moved 3'E, 4'S I |
| | 2-31-DP-45 9'WIO'W |
| | 2-31-09-20 5'5 |
| | 2-31-0P-18 13'N |
| | |
| | 2-31-08-50 moved Sinside 2-41 bldg |
| | 1300 pm. Met w. M. Lumphin + E. Hollistary |
| | - or ganized sumple bottles + equipment. |
| | 1400pm J. Camberts off site. |
| | |
| • | |
| • | |
| z. | |
| | |

| 08/2410 | 9 | | | | | | |
|--|--------|--------------|--------------|-------------|--------------|---------------------------------------|----------|
| 2-31 DGI 013-1646-009. | 200.05 | 013-164 | 16-009.2 | 200.05 | | 8124/20 | 009 |
| | | 0900 | T. Norto | n, D. Kur | Kel offsi | | |
| 0700 T. Sager + J. Lamberts onsite | | | | | i | B + 812-5 | 070 |
| 0730 Organize equipment | ·3 | - Cw | ellloca | tions) b | y 2-22 | Bidg | |
| 0751 cal PID: Sea 0250, PID2020 | | | | | ity to op | | |
| -Zero | | | | | | of 2.22 | |
| - span to 100 ppm with isobutylen | u | | | | | | |
| 0800 K. Addis, D. Kunkel (EPF) te | | LODO: Donle | rs gettin | y up at : | sito | | |
| F. Norton, E. Holliday, M. Lumpkin (Golde | er) | 1. | | <u> </u> | | | |
| ensite | | Hole 5070 | ~ 4-5' | from secon | 2 Loude | | |
| I flaherty onsite, | | · | | | | | |
| Cascade onsite | | 1937 Como | -14rm | n Asolu | UT 225 | 44 | |
| | | | | | | | |
| Things to get: | | 1135 plastic | placed | | | | |
| -garbage bags water /-spoon. | | | 1 1) : | | | 75.0 | |
| -wipes -first aid kit - duct tupe | 1 | 6050 Goma | ne# 2 | -31-PL | 2-5070 | 1-01-W4 | ž |
| -boots -extinguisher -synsha | | | wignight | Blonk | throng | h sp11+ | |
| -tyvek suits -butter knife plasti | | Spoo | n +xine | , , | | | · |
| -clippers. Andy-425-210-817 | 7 ; | (loc G | | | | 076-011 | 2-10 |
| 08/5 Health+ Safety Mtg. | | | | o.7ppm | | . 6 . 6 | |
| - Heat Stress - Overhead hazards | | | | | | for firs | |
| - Slipitrips, Falls, - Heavy equipment | | | • | Y | 1 | scraped f | |
| - Hearing - Heart Hat - PPE - Typet Gloves | | | | | | 79. 3035 | <u> </u> |
| - PPE - Type Gloves | | Sam | pieng pe | storme a | toon | Elplock by | tako |
| - First Aid - Traffic - Emergency Shutoff - Fire extinguisher | | · pag | initially, t | iut; Neld (| rew was 1113 | tructed to 1009 samp taken from | le , |
| and Qualita | | 1121 2-3 | 31-PL2-! | 507 C- O | 1-S-10 = | taken from | wall |
| - Air - Quality | | | | | | of soil pit | -X |

| | | | | | 1 | |
|-----|---------------------------------------|------------|-----------|-------------|------------|----------------------|
| š | 2.31 DG | nI | 8124 | 1109 | 013-1646 | -009-200.05 |
| - | 11272 | nd Sm | le 4- | 5.5ft | 1 . | covery. |
| | ć | 8-31-PLA | -507C-0 | 4-5-0 | -noten | ough sample : |
| | | PID: 0 | o.lppm | | -with sp | COCS. Utspoon |
| | 1137 | 362 SND | | | +line | r |
| ; - | -1 | 2-31-PL2 | 2-507(- | Ø9-8-Ø | | |
| | | PID: | olppm | -with | splitspo | ontliner. |
| | | | | | | |
| | * cont | nued from | previous | page: | | |
| i i | - 1 | steps. | T SIDES | were scr | aped to | expose |
| | · · · · · · · · · · · · · · · · · · · | frach & | soil ther | 5035 5 | amples | used |
| | | to take | sample | from | 0-1946 | 98 |
| | | - | | | | |
| | TNO | ton was | consult | ed, it wa | as decide | d Mat |
| | the | rig be moi | ed over | 1 Ft to : | side of or | iginal |
| | holo | a solit | spoon l | be driven | 10 01 | ft 198. |
| | to 10 | sample to | Mowing | WP.prot | localina. | thes than |
| | havin | a a deviat | ion ong | inal sample | is to be | disposed of. |
| į | 1400 | " "Sreals | 4 | | | 1. |
| | 1420 | Resmo | Doll or | n at | 65' | |
| | 1500 | Owilling | to 81.5 | Obgs fin | al depth | 0-() |
| | | borehol | ć | | | |
| | 1910 | | | 1-PL2.5B | 7C-01-3 | S-0 |
| | | at | 0-Lft | l lags v | noved 1 | ft to S |
| | !' | of | first ho | Te collect | ed 6 twn) | ft to S -2ft bgs. |
| | 1517 | (11 1 | وا ا | @ 2-31- | pl2-5070 | c-01-5-0 |
| 7 | | Collect | Sample | | | |
| 1 | | 1 | | 1 | 1 | |

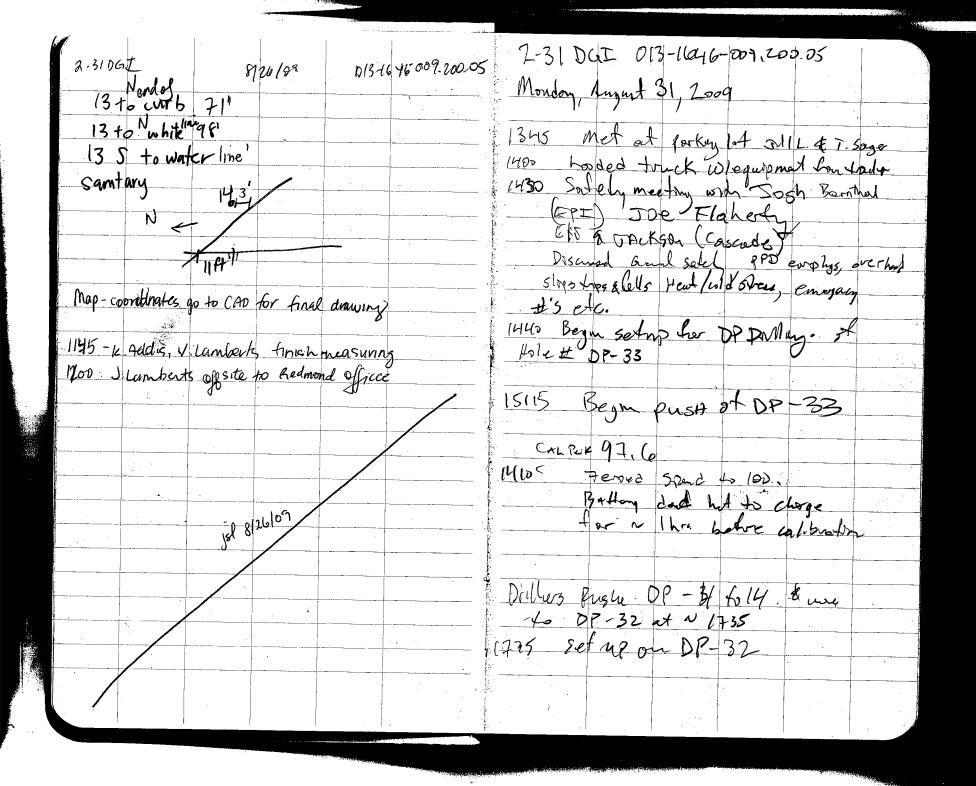
| | | | | | * |
|-------------|-----------------------|--------------|-----------|---------------------------------------|-----------|
| 2-31 DGI | ,81: | 24109 | 01 | 3-1646- | 09 200.05 |
| 1 | * | | | | |
| rec | sey 1.5, | 115 | | L | |
| | | non-str | ut . | | |
| Denge o | owy 1.5, blue gran | y Vf-c | smo, li | tte fe b | y |
| o rave | trace si | lt, don | 2 FFL | <u> </u> | |
| | | - | | · · · · · · · · · · · · · · · · · · · | |
| 1600 | I'M & - | Ted S | , -A's | Ate, | |
| | I'M & - | | | | |
| <u> </u> | | , | | | |
| 16:23 | Dropped | 50 | مهرارم ه | 1 | L |
| 16:23 | pr"A | RI | رطاهها | | |
| 645. T. | Sager offs | ite | | 3 | |
| 1653 - J. | Saga offs Lamberts | , J.F(| agenty or | isit | (D) |
| w | ell beingin | stalled | + built. | | |
| | | | | · | |
| Drillers | Names | And | y Flago. | <u> </u> | |
| (Casca) | de) | Kerr | y Lampi | new | |
| 1 | | | | | |
| 1800 - we | ll complete | 2 mone | ment to | be insta | Alla |
| ** | Morrow. | Scree | n @ 65 | 15+tba | 7S · |
| 1801. | | - | | , | L:d |
| J.Flaherty | | | | to wash | OUTSWE |
| of de | rums tom | orrow. | | | |
| -all | drums o | n palle | ts, with | labels, | |
| boH: | s facing o | utward | S | | |
| 1815 - J. (| amberts, | KAda | JIS, J. | Hahev | 74 |
| 7 | Cascas | ce of | Ste | | 150 |

na driva salahinalikanan isi K.

| 2-31D6I | | 8125/09 | 013-164 | 6009200,05 | | | | 125/2009 | | | |
|----------|----------------|--------------|-------------|---------------------------------------|-----------------|-----------|-----------|-----------|----------|---------------------------------------|--------------|
| 0645 | Lamberts +7 | T. Sager @ 6 | rainger fe | ٠ | 0948 | | | 67B-Ø1- | | mplod. A | on |
| * | guipment | * | | | | <u>.</u> | 0-1'de | epth.bgs | ~ | | 2 4 |
| 0720 | 1. Lamber 13+ | T. Sager @ | Boeing + | Er mobe. | 0954 | 2- | 31-122- | 507B-0 | 4-5-8 | ampled | Kom |
| 0775 | M. Lumpkin | @ Plant 2 | Connex | | <u> </u> | | 4-5 de | off bas | | | |
| | Calibrate P. | | | | 1001 | 2-3 | 1-112-5 | V7B-09 | 5-0 Sa | mpled | on |
| | -zeroed | | | | | | | pth by | 78. | | |
| | -span | to 100 ppm | with 15 | obutlyene | 1030 | Reco | albrakd | PID | | | |
| | -Initial | reading @ | 13.8ppm | before | | | -zero | | | · | |
| | Span | | | | dr. | | - | 2100PPM | | | - |
| 0820 | ascade ons | ile Andy, | Kerry + | Steve | . , | _ | | offsite | KARI (| ahs | , |
| | Meet @ NE Co | | | | 1/57 | J. Lem | n berts | onsite | | <i>F</i> | |
| | facu Pl2 | -507B to | 45 Ft + | | | | | Q PLZ | -30+13 4 | ermated | £. |
| <u> </u> | empletion of | of monumen | t for t | 12-5076. | · · · | a | 50F-1 | . | | | |
| k | - Addis (EP. | I) onsite | already | with | 1/20 | Set | scree | n @ 3 | 35-454 | % <u>&</u> S | |
| | pened gates | | | | | | 10 / | | | | |
| | ascade conti | | hilize | | Ske | | f interse | | | | |
| 0920 | lealth+ Safety | intg . | | | · | | scale | 1 | - | · | - |
| | - PPE | | yees . | · · · · · · · · · · · · · · · · · · · | | | rings | | | | |
| | - Heat | | pinch poir | , | | | 1 | utilities | 1 | | |
| | - Heavy equi | | | | · | -V 0. | ad mar | luis lan | es, | / | |
| | - First Aid | | ive botting | uisher | · | | | +, Fine | | · · · · · · · · · · · · · · · · · · · | |
| | - Hearing | ł. | Traffic | | · - | - tr | attic | e ffects | 1 0 | 1 1 | |
| 1 | Chemical Ha | zards | 0.5 | 1 1 | r —— | <u>-u</u> | to lity i | naps, | Centat | lane to/9 | + |
| 1930 - | Start drilling | , . | | llect | | tra | fiction | trol pla | rL | | |
| | Sample from | 0-1 ft bg | \$ | | | eВ | | Side of | | long 16t | 4/ |
| | | | | | | | | 1 | 5.50 | | |

verseer แบบตัวเดิมในโดยสมัย และ และ

| 231DGI 8125709 013-1646-009.200.05 | 2-31067 8/26/09 013-1646-009.2000 |
|---|---|
| 1300 Cascade takes lunch. | 0#20 J. Lamberts @ Boeing Plant 2 to sample |
| 1300 J. Lamberts + T. Sager gets more pallets | 3 drums containing soil cuttings from |
| for fanding drums | PLZ-507B + PLQ-507 C. |
| 1323 Cascade begins setting monuments | Sumy Warm 76°C |
| for PLZ-307B + PLZ-307C | 0800 T. Norton onsite |
| 1325 J. Parsons (Boeing) onsito to band | Instructions - sample three drums out of the |
| Man 10 - Cat | nine for all analytes sampled |
| 1400 J. Parsons aff sit. | for soil sampling under DET. |
| 1420 3 pallets (9 dnms) transported to | - use hand auger to sample from |
| | top, middle + bottem of drum |
| Gate B-42. For transport by | 0910 Symple 2-31-2900435 |
| Boeing to Bldg 2.44 | 8915 2-31-2900437 0926 2.31-2900438: |
| 1440 J. Lamberts, J. Flaherty, K. Addis, | \$126 6.31-£160738. |
| T. Jager affsile to de mobe. | Rebanded drums, jut samples on ice |
| 1515 K. Addis, T. Sager offsite | 1610 I Camberts offsite to lab ART. |
| 1530 I Lanherts, Etholliday go measure probes | 1650 J. Lumberts back@ Plant 2 |
| locations on East Marginal Way | 1129 S. Lamberts + K. Addis go to measure |
| offsite. | intersection for probes 2-31-DP-13 |
| | and 2-3-pp-14 |
| | on East Marginal Way, |
| Jsc | |
| 8/25/09 | 29 DP-14 E from cub |
| | 291 DP-14 E from cub (4) sewer. 9ft 145 santary 145 13 56 ft 11ft to S (moved 14) |
| | 43 73 56 PM 1144 LC (1111) |
| | 14313 56 ft 11ft to S (moved 14) after these measurances |



2-31-DP-33-01-5-8 1530-2-31-DP-33-041-5-6 1535 2-31-DP-33-09-5-\$ DP-2-31-07-04-01-5-8 IDH TIME 1630 2-31-07-04-04-5-0 1633 S-31-DP-04-09-5-0 DP#32 ID# The 1743 2-31-07-32-01-5-0 1745 2-31-DP-32-04-5-0 1748 2-31-08-32-09-5-8 DP# 31 Time TO# 2-31-07-31-01-5-8 1858 1902 2-31-D7-31-04-5-D 1906 2-31-DR-31-09-5-B 2-31-DP-31-01-5-4 (PO)

| 231DET | | | | 3-1646-004 | 7.200.05 |
|------------------|---------------------------------|---------------------------------|---------------------------------|------------------------------------|---------------|
| 1851 | Stues | DR3 |) | | |
| [925 | Resun - Zof | e DP 2+ No | -4 be | low Ref 1 | - : |
| 10,5 | | | | | |
| | • | _ | stoget ars ws | | |
| | | -Sodiw | mbisulf 9-10) 9 (7-8) 9 | oves | |
| | - | | heen | | |
| 2045 2130 Ma | DPH ad Drum | Temmo | ted a | if 45 | (00 |
| 2215 T. 2230 Mov | Soge v red watch water tr | ralk to V (purge) egtment | to 2-4 | storagea © U8 In 2 9 Bldg | Column -44 |

THE WARLS HATTER

| | | | | | 1' | | | |
|------------------|-----------------|---|-------------|----------|-------------|--------------|------------|----------|
| | | | | | | | | |
| | | | n 2116T | - | 011/2-0 | | | |
| 2-31 DGI | 8/31/2009 013-1 | 646-009.200.05 | _ | | 9/11/200 | | | 1 |
| - 1245 Bea. Hall | 2 Takes last wo | ter sample. | 1315 J. | Lamber | S dropped | Sample | es off (a | AVET |
| J 0 221 | DP-64-48-W-P | 0 | 1315 J | Sagar q | riched | so supp | pes aG | runger |
| 1/20 | 1 - 00 | form | 1345 1 | Lamb | cits + | T. Sarge | e onsite | - |
| # 2300 Drillers | Cascade pulls | castrog | | Plann | | | | |
| - DP-64 | | | 70 | e and | d cloud | 4. Som | e vains | howers |
| 15 J. Lanbert | , of the | | 1400 60 | ther su | oplies | - 2- | 7 | |
| | | | | | | | | |
| 15 | | | 1 | | s for wa | | | |
| 7 | | | <u>.</u> | | ling of | 1. | | |
| 16 | 7 | | | rea 67 | x parame | Kis - lg z | prock | 5 |
| TI | | | | - | <u> </u> | - PIP | | |
| 16 | | / <u>· </u> | <u> </u> | | | | rlevel n | |
| 16: | | | . 1415 | | | | | |
| 7 | 1.1 | | : 5M | site @ | DP-03, 6 | P.28, D. | P-37 ar | rd. |
| 7. | allening | | | _ | do Flo | | i | |
| 1h | all I | | 1430 H | | · . | 1 | . | |
| | 6/31/09 | | | clineter | os fallo, | - boar | lind ovo A | echon. |
| \ 7 | (1311 | | | PRE | 3 10000 | | rat, | |
| 17 | | | | frall - | | - 11111 | ad haze | indo |
| D' | | | | fraffic | Lister | - Illim - I | au naco | 10- |
| The | | | | | pofection | | | |
| 185 | | | | | eg u ijaren | | | |
| 186 | | | | 415 and | 18 | -air4 | non Horisa | |
| 191 | | | | xhaust | | - Meat | strees +s | roke |
| 190 | | | P40 Ca | heavy In | Thing | -drum | 5 1000572 | |
| | | | · 0+> · | | 0 | | | |
| · | | | - (49) (A) | worked P | ~ Mi Lou | noka at | sile trail | 1 |
| | | | 1456 | | | , W. | | |
| | | | i . | | | | İ . | |

| fr. | , i | |
|---|-----------|--|
| (cont) 1-31 DGI Mor, Sept 2, og 725 to 52 1458 874 pus 97-3 | 2-31 DGI | 9/1/09 TS/JSL 013/1646.009.200.05 |
| 2-31 Day Mor, Sept 2, 09 1231032 | Samples | |
| 1458 Stat M 07-5 | DP-3 | |
| | Tire | ID. |
| Suple II The | 1507 | 2-31-DP-Ø3-Ø1-8-Ø |
| | 1510 | 2-31-DP-03-04-5-0 |
| 1507 | 1512 | 2-31-09-83-84-5-4 |
| 15 | 1515 | 2-31-DP-03-09-5-0 |
| 1,1532 Stor Push DP-28 | BR 28 | |
| | 1547 | 2-31-DP-28-01-5-8 |
| T. PID Anabrand randy 25.2-5.2 | 1551 | 2-31-09-28-64-5-0 |
| | 1555 | 2-31-DP-28-89-5-W |
| 1630 Andront Av ready PID=0,0 | D9-26 | |
| | 1956 | 2-31-DP-06-01-5-8 |
| 17 1635 (ascade mobod sack to | 1959 | 3-31-DP-06-04-5-0 |
| DP-33. | 192004 | 2-31-07-16-09-5-1 |
| | DR-36 | 2-31-02-8 |
| 17/658 Resue pur NT DP-28 | 2037 | 2-31-07-36-81-5-8 |
| 14-22P+ | 2034 | 2-31-07-36-84-5-8 |
| | 2041 | 2-31-DP-36-89-58 |
| 1810 Term DP-3 at 245 | Fand | In 11100 0 50 211 x0-21 N. DI |
| 1 | ho Floh | enty instructs ablow to top things. |
| 190 1950 Beyn PP-D6 | Clay of | At the william of Gill a cold of the |
| 1 | Land wola | s Jit is within office spaces. Cascade |
| 2020 Amout Ave Pid = 72 | ' , ' | estic, swelps, + mpps area, vents |
| | exhau | 91. |
| | | |

| TISIJE | T29 1je1 | |
|---------------------------------------|---|------|
| 231D6I 911/09 913-1646 | -009.201.25 2-31 DGI 9/2/09 013-1646-009-20 | 0.03 |
| 2135 Resume 89-86 | 1030 J Lamberts & Annex to have | |
| | falllight-repaired on truck | |
| Things to Get | 1100 The Lamberts gets ice | |
| 1. ·Alconox + Jug | 1315 I Lamberts on site @ Flant | ے |
| · Paper Towels V | for 2-31 DGI | |
| , Methanol Vials | weather sunny, some edonds -7 | 0°F |
| o 40z jars | 1330 7 sager onsité | |
| 12225 DP do Complete to 45 ft bgs | 1345 ART on site to pick up somple | 4 |
| 7 2330 T Sager + J. Lamberts off rite | from 9/1/09 J. Bernthal releas | الجا |
| 7.2350 (20ga) - 3.00 | eustody | |
| | Trager + Clamberts gether | |
| 16 | supplies (see prev.page) | |
| | + PID - Tyrek (L) | |
| 10 | - PCB bottles | |
| 14 | 1345 Cascade onsite @ Bldg 2-31 | |
| 1= 1911/09 | to begin Geoprobe work @DP. 34 | +, |
| 17 | DP-37 | |
| | 1355 Health+ Safety Ntg with | |
| Tr - | Cascade, Joe Therty (Boeing) | |
| 185 | Ush Bernthal (FPI) + Golder | |
| | - hydration - PPE | |
| 191 | - slipstrips falls -ear protection | · |
| (%) | - hard hats -traffic safe, | tu |
| | - breathing fore - heavy compris | ot . |
| | - heavy listing - drums Iwaste | |
| | housekeeping -overhead hazards | د . |

| JSL/T2-S | | 2/09 Z-31-DaT |
|--------------------------------------|-------|--------------------------------|
| 2-31 DGI 9/2/2009 013-1646:009.20005 | 72, | 12 € 18COSD 013-1646-009, 2000 |
| 5000000 | Time | SompleIO |
| zeroed + Sparra | 1493 | 2-31-08-85-21-5-8 |
| such sephutuleal | 1457 | 231-09-05-04-5-0 |
| 1 89.2 ppm before spanning | 15øø | 231-D8-85-89-S-8 |
| | 1502 | 2-31-D9-85-89-5-4 |
| 15 1440 SLT DP85 HO 15C-1 | DP- | 34 |
| 1 0 3 2 31/ | 1928 | 2-31-DP-34-01-5-0 |
| 11 1517 SLA DP-34 | 15 30 | 2-31-DP-34-04-5-8 |
| To to 15 Foot | 4832 | 7-31-DP-34-84 3 × PLS |
| 16 1625 Rosme DP 05 at 15 Grot | 1532 | 2-31-DP-34-04-5-4 |
| 16 1625 Rosme DP #5 at 18 frot | 1535 | 2-31-DP-34-09-5-8 |
| 1 1723 Stop at 73' DP-85 | DP-N | |
| 17 CPI gul Jacen | The | Saple 50 ns |
| | 1840 | 2-31-DP 48-01-5-0 |
| 17 1825 SArt DA-11 | 1843 | 2-31-DP-11-84-5-0 |
| | 1849 | 2-31-09-11-84-3-4 |
| D 2020 Resun DP-11 at 15' | DP-48 | 2-31-0P-11-29-5-8 |
| 195 | Time | Somple ID |
| 185 1812117 Term. DRII at 45'begs | 1915 | 2-31-87-11-8 |
| | 1915 | 2-31-DP-40-01-5-0 |
| (90 | 1919 | 2-31-DP-48-84-5-8 |
| | 1926 | 2-31-DP-40-19-5-0 |
| | 22.15 | off site |
| | | |

| | 0.0 10.00 | (H) | · · · · · · · · · · · · · · · · · · · | 9/3/09 | 2-3 151 ons: | 1 - DGI | 013-166 | 16-000.2 | 2007 |
|--|------------|---------------------------------------|---------------------------------------|---------------|-----------------|-------------|----------|----------|------------|
| Slurry -> | pcBslarry | -Unstelling | | Call | broke ? | * = > | 40 (145 |) | |
| not | - VOC5 | PCRA: | <u> </u> | 1511 Cal | 1 011 | | Cloud | 1 650 | • . 7 |
| l Veg. | -SUOC | - Total CN | | | | | | | |
| 15 -con f | irn whelle | 4 | - | | · | | | | |
| ! | _ | 1 | | | | | | | |
| T -Joe | to get lat | PCB cores sels today | | | | | | - (| |
| | | | | | | | | · · · | |
| 16 | | | | fi (e.) | 50 247 | , | | | |
| 1 | | ··· · · · · · · · · · · · · · · · · · | | <u>lusu</u> - | DY-87 | STAR | | | |
| 17 | | | | 1519 | | | | | |
| 17 | | | <u> </u> | D4-38 | STAR | -7 | | | |
| $\left \frac{\overline{D}}{\overline{D}} \right $ | | | | 1605 1051 | m DP-31 | 3. to one | h addri | rend | |
| 190 | | | | 2 tee | t as w | ter prod | hofm ve | 25 br | Ine L |
| 18 | | | | SFLT | & clayer | , s, 17 bal | on 11ft, | | |
| 191 | | | | 635 Res | um preh | of DP-1 | 97 a+ | 1587 | |
| (90 | | | | | 9d tre | ļ | _ | | |
| | | | | | 77 V | 70 | | | |
| | İ | | | | | | | | |

| 9/3/ | 04 - 2-31-DGI 813-1646-081.280 START DP-24 | Sampl | e Lost (cox. |
|------------|---|-------------|--------------------|
| | | DP-2 | |
| RE | | - 7 me | Sauple FD |
| 1 2013 | D8-24 publ X+n & feet From 15-17++ | 2030 | 2-31-DP-24-81-5-8 |
| | du to poor water recovery. | _ 2531 | 2-31-29-24-24-5-2 |
| | | 2035 | 2-31-DP-24-89-5-2 |
| 20mg/ | e Lobb | 2200 | C C 129 C C 1 |
| 16 | | | 1. Sugar off site |
| T Dr-8 | | 2220 | I combate off site |
| 11 Time | Sample ID | | |
| 16 1513 | 2-31-07-07-01-5-0 | | |
| 1516 | 2-31-09-07-04-5-8 | | |
| 11 1520 | 2-31-D9-07-09-5-0 | 1 | |
| 17 DP-3 | 3 | | |
| 1 Time | Sample ID | | |
| 7 1539 | 2-31-DP-38-01-5-D | | |
| D 1543 | 2-31-DP-3B-84-5-B | | |
| The 1547 | 2-31-09-38-89-5-8 | | |
| 3º DP-1-18 | > | | |
| & Time | Souple IA | | |
| 9 1932 | 2-31-DP-48-015-0 | | |
| 100 10134 | 2-31-09-48-14-5-18 | | |
| 1946 | 2-71-07-48-09-5-8 | | |
| 7, | | | |

| Tuesday September 8th 2007 Purplane | 1705 mare Pables Lada |
|--|---|
| 1320 meet at arking lot & drive to conea | 1725 Begn pront DR 37 |
| 1345 To DP-41 & DP-39 to segn | 1735 8tp 0 R#37 2 15' |
| 1, 1347 Cal tes Amount really 2-3 prive to | (743 Begin push of DP 35 |
| T cods cod was on | 1818 resm DP-35 15 17 fr 1935 Begin Pushot DP-41 |
| 1, 1429 DP-47 S2 Pust | 2024 Begin puch of DP43 |
| 17 145 DR49 SANT REN | 2110 Fursh Loggin DP-43 Begin Cleanup of Storging orea, |
| 185 Recolitate PD Antoned Art = 0.7 185 Reulianted D.D Habert Art reading | Sample collection Lost |
| 19 1605 Beyn preh of DP-29 | DP-47 Time Sample \$0 80 1439 2-31-DP-47-01-50 80 |
| 1620 Shop pushed DP- eq ut. 15 | 1442 2-31-DP-47-01-5-4 88 1444 2-31-DP-47-04-5-0 0.8 |
| | (conti) |

| v | | | | | | |
|---|-------------------|---------|-----------|----------------|--|-----------------|
| | | | DP-29 | (Cont) | _ | |
| List of reels Box 2000 0 | | | The | \$7# | | |
| | KV | | 1640 | 2-31-29-09 | -5-6 | D. 5 |
| | V | | 10P-37 | Boulle ID# | - | B.B. |
| | \mathcal{Q}_{0} | | 1748 | 2-31-37-01- | -50 | 81 |
| Formers N For the | Endek | J | 1751 | 2-31-37-84- | 5-8 | 9.0 |
| Bosts - Box Hel VI | als V | , . | 1758 | 2-31-37-84 | | p.d |
| 1 Harpant - Box PCB | V | | DP-35 | (F) | | |
| FILTORS | | | Twe | ID# | , | |
| By metals | V | | 1822 | 2-31-35-81- | 5-20 | 0.0 |
| Syringes | √ | | 1824 | 2-31-35-84- | 5-8 | 0.8 |
| (Cont) | | | 1829 | 2-31-35-89- | 5-0 | † |
| 1 Sample offerting List | | | | | | T |
| DP-47 | | | DP-41 | | i . | |
| Time Sample ID | PXD= | | Pinne | Ŧ ># | | |
| - 1447 2-31-DP-47-B9-5-8 | 9.0 | | 1949 | 2-31-012-41-01 | -S <i>-19</i> | 0.0 |
| DP-49 | - | | 1951 | 2-31-DP-41-84 | -5-20 | D.F |
| Time Somple #D | | | 1955 | 2-31-DP-41-109 | -S-Ø | 08 |
| 13 518 2-31-DP-49-01-5-0 | Ø. J | | シャーク | <u>-</u> - | † <i>– – – – – – – – – – – – – – – – – – –</i> | . 5 |
| 1 1 CZO 2 21 DA 40 -84 -5 - B | 8.7 | | Time | IO# | | |
| 19 1532 2-31-DP-49-29-5-1 | Ø, Ø | ļ | 2035 | 2-31-DP-43-01 | -5-8 | Ø. \$ |
| 19 10 10 10 10 10 10 10 10 10 10 10 10 10 | | | 2037 | 2-31-DP-43-04 | 5-8 | Dr F |
| Time FDH | | | 2048 | 2-31-DP-43-8 | 9-5-8 | D.A |
| 1623 2-31-DP-29-01-5-B | y 15 | | T. Sager | of site 16 | 05 | |
| 1428 2-31-DP-29-84-5-B | 8.7 | | I Lon ber | to off or LE | 35 | |
| | | | | (| | |
| | 1. | | | 1 | | · |

| 813-1646-809.200.05 2-31. DUE | |
|---|---|
| Wednesday, Sept. 9, 2009 | Sp 7115 |
| 1130 To Granger-Southe-pickup 4ml | DRS/45, 44, 46 upp I foot prohos with 1" Danets sted no moderate |
| plastic sheeting. | (Box move to Athorn |
| 1200 onsite poetup van | 1830 'DP - 45 Problement Cost of Sal |
| 1240 J. V. Lamberts 0251 | 1805 DR44 |
| 1300 MUETW/DrMes | Did not lay Sangle 5-5' |
| Discussificant Sacheter (PPE) | y well |
| (Broton & word) | Moneto DP-46 |
| 1 | 1922 Shot prod for DP-46 |
| send 195 Colod to 180. DR | 101/2 8 12 1 2 |
| 1- 1320 STASST Propert OP- 50 1372 Stop push of DP- 50 | Anbrord Reordy 45 |
| | teots 100 02 |
| 1530 Sough Stock Stop DP-25 | Los & Emplays |
| 16 1557 Rem PP St DP 25 16 420m. | |
| | |
| 1705 GLAPON STOP- Bobaet George | |
| | |

| Sept. 9,09 paper fourels & 2 @ Grainger - gentage large @ Grainger J. Gloves X 6 Grainger | Sample List (Cont) | |
|--|--------------------------|--------------|
| | DP-26 Ture Somple ID# | Pto= |
| mgloves x 4 arranger | | 0.0 |
| methanol urals | | 9.0 |
| Sodrum bisulfrials | 1615 2-31-04-26-199-5-1 | |
| 402 × 2 | DP-43 | |
| 202×1 | Time Sample I DH | |
| ear pings | 1988 Z-31-DR-45-81-5-8 | 0.0 |
| , 3 | 1918 2-31-DP-45-84-5-8 | 60 |
| Sangle List | 1922 Z-31-DP-45-89-5-8 | 9. \$ |
| DP-5d | | |
| Time Sample IDH | DP-46 | |
| 1355 2-31-DP-50001-5-0 | The Sample ID# | |
| 17 (7) -31-DP-58-184-5-DV | 1956 2-31-DP-46-81-5-8 | 9,0 |
| 1406 2-31-DR-50-49-5-0 8.8 | 1958 2-31-DP-46-84-5-8 | g.\$ |
| | 2007 231-DP-46-09-5-B | Ø. B |
| DP-25 | | |
| Time Somple ID# | P | |
| 1270 2-31-DP-25-01-5-0 | 2140 T. Sager off site | |
| 1728 2-31-DP-25-04-5-0 D.D | | |
| 1 1742 2-31-D9-25-09-5-0 | | |
| | | |
| DP-26 | | |
| Ine Sample ID# | | |
| 7-31-DP-26-81-5-B | | |
| 7-31-DP-26-01-579 | | |
| ((coin) | | |

Ψ,

| 1h | us In Se | pt 19, | 2009 | Port | dond | 1711 | (5 | | 00.4 | | ··- |
|--------|------------|--------|--------|-------|---------------------------------------|---|------|---------|--------|-----|----------|
| * | | | | | 10.1 | 1214 | Degn | puch of | W11 | | |
| | T. Sugar o | | | | · · · · · · · · · · · · · · · · · · · | : | - | | | | |
| 1)10 1 | not w/dr | Mes 1 | J084 | PCI & | Joe (Belly) | 05 | | ~~ | | | |
| - | writed | prop | ood Bi | site | to disuse | 3345 | Beyn | mgh s | + D217 | | <u></u> |
| | acces | 55, | | | | | | | | * . | |
| | i i | . Ju | - Ct | | | 1405 | Beyn | prop of | DP-16 | | |
| | | | · | | | 1516. | Ban | frost. | DP-18 | | |
| | | | | | | · . ———————————————————————————————————— | | | | | |
| | | | | | | | | | | | <u> </u> |
| | | | | | | | | | | | <u></u> |
| | | | | | | | | | | | |
| | | | | | | | | | | | <u>.</u> |
| | | | · | | | | | | | - | ·. |
| | | | | • | | | | | | | |
| | | | | | | | | | | | |
| # | | . , | | | | , | | | | ĺ | |

| Souphel DP-2Z | 13+ | P | Drum So | | · | | . | |
|------------------|-----------------|-------------|----------|--------|----------|-----------|---------------|-----------------------------|
| .3 | | 200 | Time | · • | | | | |
| .3 | | 0.00 - | 1 | , , | e IOH | | | |
| .3 | | PID= | · | 2-31- | 198051 | 9 - Ligan | 15-2 COV | inglik |
| Time Sam | pleID# | | <u> </u> | 2-31-7 | 900519 | - Solids | -) in | omple illsample later |
| | PP-22-01-5-0 | Ø.Ø | 1805 | | | - Liqui | ge m | rater |
| | DP-72-94-5-8 | Ø. Ø | <u> </u> | 2-81-2 | 900518 | - 501.25 | <u> </u> | ļ |
| | DP-12-Ø9-50 | 0.9 | 1815 | 2-31- | 19 00 44 | 1) | U Noso Pha | lid |
| | | | | | | | 177 | - Je |
| DP-10 | | | (910 0 | . (| ac | to | | |
| (P N - 1 | PLIOH | | (910 7 | 11) | - A(C | 1.0 | | |
| M: U'i | DP-16-B1-50 | Ø, Ø | | , " | 9 C1 DV | | | |
| D 12 1 | DP-16-84-58 | ø. ø | | | | | | |
| | 0P-16-89-5-D | Ø. Ø | | | | | | |
| DP17 | | | | | | <u> </u> | | |
| | mple ID# | | | | | | | |
| | - DP-17-01-5-8 | Ø .Ø | | | | | | |
| B) B() (| DP-17-84-5-8 | Ø. Z | - | | | | | • : |
| li Hi | DP-17-19-5-8 | 0.0 | | • | | | · | : |
| .equ | ipmont Blank | | | | | | | |
| | 1-DP-18-81-W-3 | | | | | | | |
| DP-18 | | | | | | | ···· | |
| 1. 19:1 | mple ID# | | | | | | | |
| | - PP-18-201-5-8 | Ø.\$ | | | | | | <u></u> |
| | DP-18-04-3-0 | Ø. J | | | | | | |
| | DP-18-89-5-9 | Ø, Ø | | | | | | |
| 1614 2-31- | DP-18-04-5-4 | Ø.0' | | 1 | | | | |
| | | | | | | | | |

4 .

-~

| 5#813-1646-009,200,05 Friday, Sept. 11, 2009 Clar asuny ~60000 | |
|---|---|
| 2-31 DUI | Real to Dip |
| 0630 T. Soyer onsite | 0350 Noticed Mat Soupl# 2-31-DP-29-5-0 |
| J. Lamberto dropping of south | Lab called + Instructed to submit |
| Josh B. with PCI has car frontly | HOZ Jav for Posolids, Metals, +CN |
| will be late this Am. | 1973 Resme DP-12 15-4587 (223 DP-12 to 45) |
| 0700 met w/1 Mers inside building 2-31 will start & setup as somas | (032 More back to DP-10 |
| JIM L. Accords on site | 10-46 Pesum PR10 |
| 0700 J. 11 L. ons, tu | 1201 Coplated loggen DP-P |
| 0725 Cal PJP 0730 STADT REN of DP-12 | Decon Stagny area. |
| 40 15' 91-Tw 0754 | A · |
| 0935 to DP-10 | 1335 J. Lamberts offsite |
| | |
| D837 Signat pust of D7-10 | |

e salah darian dalam kanan ke

| | | | | 2-31 DG | I 013-1646-2091 | 280.85 |
|-------|------------|--|--------------|-----------------------|--|-----------|
| Se | pt 11/2009 | | | Monda | y, Sept 14, 2009 | Mosty |
| Sampl | elist: | | | | | 1001 |
| 1 | | | | <u> </u> | Si Lambests & T. Sag- | w m siti |
| DP_ | 12 | | | h Meh 1 | | 1. 6 |
| Time | | | PFD= | _ <u>059</u> 0 | 10 Site tailer - Di | ckup & C |
| 0754 | | 12-01-5-0 | <i>I. I.</i> | | To site tailer - pro PED, PECK up PRE | , IED= |
| 0800 | 2-31-DP-16 | | Ø. Ø | | | |
| 0815 | 2-31-DP-18 | 2-09-S-0 | - D. D | D555 | set up staging ar | ea for 1 |
| | | | | | day | |
| DP-1 | 1 | | | de de | | |
| 0912 | | 13-01-5 B | Ø. Ø. | \$cop | J. Bentul onst | y - Netom |
| 0914 | 2-31-01-1 | 19-94-5-8 | | | that do Marg user | |
| 0928 | 2-31-DP- | 14-89-5-Ф | Ø. 7 | | montes lete due | to troi |
| | | | | dar 1 | D Mare 1 | <u> </u> |
| | | | | \$76x | Dillers ons to | |
| | | | | - (d) | 0.14 | ,/ 7 |
| | <u> </u> | #\\ \\ \dots | | Ø72b | Or Mers making & sex | my word |
| | <u> </u> | | | - 1 07725 | on sign to gate | 2914 |
| | | | | m/2 2 2 | 91100100 | Den 16-15 |
| | | | | 7733 | Stat parot DP-1 | ני-ק טיי |
| | | | | - 1 | mitte DR | 30 |
| | | | <u>·</u> | 0759 | muet do DRA | 99 |
| | | | | 6756 | 9) 7 0 0 0 | 30 00 |
| | | | | \$ P150 | Divi high De | 09 9-1 |
| | | | | 0505 | Short engr DR 36p DR-89 et | 15 |
| | | | | POY | | |
| | | | | | | |
| | | | | | | |

mostly cles today ger on site vickup & calibate E. PED=100 rea for the te-reformed me ere running 40-50 to flot three Clardy Ay wan DP 28 DR Ø-151 29 -09 y-15'

| | | Sept. 14,2009 |
|---|--------------|--------------------|
| SODE 14.7 460 | Sample | , dala sheet |
| Sept. 14,7669 \$344 37ART RST SP-412 9-15 | DP-08 | |
| | 7me | Sample ID# |
| 1999 Prilles mused back to DP-98 | \$745 | 2-31-DP-08-01-5-0 |
| | Ø748 | 2-31-09-08-24-5-4 |
| 19916 Rosume prost DP-88 # 15-45' | 0749 | 2-31-59-00-04-5-0 |
| | Ø8øø Ø8øø | 2-3-09-03-09-5-8 |
| 1\$15 Cascode done OP-88 4046' | DP-09 | |
| | 8874 | 2-31-DP-89-81-5-8 |
| 1533 DP-99 No naking sufficient water | \$829 | 2-31-27-89-84-5-8 |
| Cascade resum proh to 1787 208+ | 8834 | 2-31-09-09-09-5-0 |
| 1933 DP-99 No making sufficient while Cascade resm. proh to 1797 208+ Scheen wheelt to 12-168+. | 0036 | 2-31-DP-09-09-5-4 |
| | DP-42 | 5 41 DC |
| 1188 DP+ 199 - Resume onto 2 9'-45 | 8981 | 2-31-DP-42-01-50 |
| | 8983 | 2-31-08-42-84-5-8 |
| 1747 DR8-45' Screen sot at 44'-48' | 9906 | Z-31-DP-42-B9-50 |
| Screen sot at 44-48 | | |
| | _ { | |
| 1348 Decon sdaying station | _ | - Sager A & Z |
| | 1740 | - Siger 2034 |
| 1400 Dungson) Syal Bricket con John Comest woothe from Sept 11, M Son waste Drum. | 550 6 | 5. Lankers of gity |
| Syal Bucket con long comest waste | (0./~~ |), hankers 30 GV14 |
| from Sept 11, M Son waste Drum | _ | |
| Contacting Jennofes Rarsons w/Boens | | |
| to orderse were the bruket should be | | |
| mored to. | | |
| | | |

PtDz

8.8 9.4 9.7

Ø. Ø Ø. Ø

Ø,Ø

P.P

| Sept 15, 2009 NUDOF 0430 - DM Lamb As & Ted Szyr orsite | Peal PLD read 100, Anbard 0,0 |
|---|---|
| 96.8-Cal. +> 100. | 0733 Fre Cal PTD 96,3 Zeroed |
| 1 0510 0-4' 0513 4-5 rehind at 517. | 0833 Stat Dr. 27 |
| Dogo Soll to Solt Dogo Soll to Solt Dogo Soll to Solt Dogo Soll you go DP 30k DP 13 n tunnel: Cores let In hole Inne was | J. L. Spoke to Ted Norton at an other in Redmond was, about rehisolat Sft. on DP-44. Ted Said he would whe to offend to re-sample further to the South Go Wen ull arrange to recover at a |
| nove to End whe to extact Core Part Beyon Ryr of D8-32 | 1005 Movets Stagny orea |
| 0647 DP-15 | 1115 840 99-23 |

.

. .

~

| of 1/2 | overent too | (1.64) 50 |
|---|-------------|------------------------------------|
| Sept. 15,2009 | or an this | (COSH) Sept. 15,2449 |
| 12/2 74 12 20 50 | N. Do (N. | Time SougheTO# PTD |
| 1253 Dot to dup p' Son 2-44 Bld by | 19 Mas 190 | 2-31 DP-23 |
| | | 1133 2-31-D7-23-01-5-0 Ocp |
| Sample collection Log | | 1134 2-31-DP-23-84-5-8 0.5 |
| | | 1142 2-31-07-23-09-5-0 00 |
| DP-414 | | |
| Time Sample IP | PIO | |
| 0520 2-31- DR-44-81-5-8 | 0,0 160 | HAZ notre lables on mot drus. |
| 0522 2-31- DP-44-89-5-8 | 0,0 HOLP | Hold for charactersother slug duns |
| | | Add Somple I Dis aux some |
| DP-15 0701 2-31-DP-15-09-5-0 | dio | Sample dances la soit d'imme |
| 0401 2 31-77-13-94-3-9 | | AL Per Jennifer Presons request. |
| DP-30 2-31- D7-30-89-5-7 | 24 | |
| 0638 2-31-DP-30-p45-p | 9.3 | 1320 T Syr A Str |
| | | |
| DP-27 | | IMD J. Landots off Sty |
| 0922 2-31-DP-27, 81-50 | Ø,g | |
| 1 Dans 2-3-28-27-94-5-10 | 7.8 | |
| 04 37 2-31-09-27-09-5-0 | D. J | |
| DP-21 | | |
| | 0.0 | |
| 1100 2-31-DP-21-01-3-8 1104 2-31-80-21-89-5-10 | Noy | |
| 1110 2-31-DP-21-89-5-0 | | |
| | | |

| | | 1 10- 16- | 2 H4 | resof artyclarby | 45 | of Davin | Soulle | 5 | 200 Zoo | |
|----------------|--|--------------|-------------|---------------------|----------|-----------------------|--|-----------|-------------|-------------|
| wed | 46-889,200 wesdoy, Sep | Con Con 10 1 | - THE | <u> </u> | | / | , , , , , , , , , , , , , , , , , , , | | | |
| | | | | | Time | Samp | le IOH | | PIR Reading | |
| <i>"" "</i> | 1. Sugar on | | | | | | | | | |
| | | | | | DP-Ø1 | | | | | |
| 5645 | Cal RID | Red LOI | calét | 40 (00 | 0728 | 2-31-DP | 21-01-5- | Ø | | |
| 670 | 111 a. A. ha. | 2xuk 0-25 | Rus is a | he left back | 0730 | | 01-01-5 | | | |
| 0629 | CALSON E ST | of push of | 1 DPC | 15,00 | 0737 | 2-31-DP- | 01-04- | <i>•</i> | | |
| | ! | | | | 0745 | 2-31-DP- | 11-29-5 | -0 | | |
| 0100 | Cascade sto | + aushof | DP-1 | <u> </u> | -0917 | | | | | |
| 2700 | | | | <u> </u> | DP-39 | | | . (| | |
| 0831 | More stagmy | 100 Jo DR32 | 7 1 | | 0912 | 2-31-DP | -39-01- | 5-0 | | |
| <u> </u> | J. J. J. J. J. J. J. J. J. J. J. J. J. J | | · | | 0924 | 2-31-DP | 39-04- | 5-B | | 10.0 1.0111 |
| 0855 | Start DP-3 | .81 | | | 0937 | | 39-89-9 | į | | |
| | i | | | | 0939 | | 39-09-5 | .) | | |
| <i>Ø 06</i> 66 | Recal PID | Anbert re | adn, = | <u></u> | | 1 | | • | | |
| ~ 17 <u>~</u> | 1.8 | | <i>Y</i> | | 1335 Ca | sude pres P-39 I | kmy to | onen of | | |
| | (1.8) Roy DS q | 4, 9 | | | D: | P-39 f | ron 44' | | | |
| | Tenes 100 | | | <u> </u> | F* | | _ | 1 | | |
| | | 1 | | 1 | 1342 3 | egin Push | of DR | 9 from | 44' | |
| 105b | Rosm DP- | 39 at 16 f | eet | | | | | | | |
| | | i | | , / | 1420 8 | In Mer Fe was bout | ported p | wt 16' | of rod | |
| HK 1155 | Screen se | T ut 44-4 | 0 4+ | | | was bant | Sandin | beheen | 48-521 | |
| 11.50 | | | , | | <u> </u> | I more o | 23 15 6 | ost jully | eed to | |
| 1013 | Faid large 16 | Boom, | Starono | 2h | | ermente | | | | • |
| 1000 | Fred Women | a lact don | Mar noga | 1 | | Morton) of | | onsite | | |

١....

2000 A Sept. 16, 2009 725/JSL 1625 T. Sage Segin walkatt 516 1438 52-56 dofficult push. T. Margon requested originals of 1635 off site to cor (T. Sager) dull & DP-logs be filed & copies How Ted Sage A gitte to other made asap. molecular to obtain New Pro 1500 Dilles unable to advance past 1a16 Dritters Move to DP-02/A push 56' Tray lost a 40' & suple pulsale to 15/495 to collect Soil + 1528 J. Barnthul (1722) off 51/2 GN Sample to take Sal & waster Samples to the I harded taking son on from 640 holding Drun in 1372 2.44 181 Pallog Cleany up DP-39 132/ Born PP backfilled with bendonse who of of differs truck 1600 Jum Lambols of gite 1602 Cascade photon Consider povement wh rapid set cements 161 Tones of to drap deconvaler

Plant 2 2-31 DGI 913-1646-009. 200.05 Thirday Sept 17, 2009 9ept 17, 2669 1600F Class \$815 Resmi graph collecten at 55ft. \$636 Tisage & J. Lamborts on site with 5 for songle interests my 5. Berutul EPI 6825 PIO MAZEUNCHINAY J. L. AHENDAZ \$1045 got up stegmy aven PlasteBaggres for loter analysis 6936 At what appears to be MARINE Sut Agutard at 70-74' Single \$7.66 Cal pro And rendy 0,9 Zeot becomes vandage at 741 wh 983, 99,1 nirusmy shell bagments below 725 CAL to 100 \$72\$ Coscede setting up on DP-39 EPI to Set Screen. to re- pri at core ~ 10" sof yestrongs (188 Jm Pender - Cascale Drillay ore Fred wallace & Joe Flahertz \$73\$ Casadu way LA Ry 7730DT Boeng prive to checkin work two cell stiticles one on left GOBLEURZ. 5, te of operators on 2 pancel on 1025 red coxto to left of my most. DimPender (Ensi) Fedberlese Pull the cord and , two 11 Kill the & Joe Phakerty, lef 7 I'm any As. Styled Da by Health a dr M my area Softet Plan Begin prop of DP-39 rry ms 1100 Ted Sayer offsite to go 10 Redword 587 Sampler 10 Obtain new PID mcker

Sept. 7,2009 1216 Drillers Move to PROZ to push to 15' bgs to collect soil + Gw sample 1218 Complete to 5ft hys 1227 No recovery from 5-15ft hgs. Instructed drillers to move over tretry hole. Free product no ted on insides of probe tubing. TPH odor nokd. 1228 Dullers start to dull @ PROZ to 15' at location to 5 of original location. No recovery again past 51 1246 Trying again @ DP-02 1247 T. Sage back on of the 1307 Cal Now PID Reads 0.0 (ell+0100 DP-02 ATTP 1 \$-5.2,5f Pec 5-18 18+ Rec 17-18 0 oil splatfor or inside of plastic liner

| | | <u>-</u> | Soft | . 17, | 2609 | ~ |
|------------|------------|--------------|----------|------------|----------------------|-------|
| | DP-02 | | | / | , | |
| | 7 | 2 | | | | |
| | • | is fe | C | | | |
| _ | 5-10 1 | ft Re | c. | - | | |
| - | 10-15 | z" pe | agrend | oil sple | the TPH st poolfa | عفيات |
| _ | | · | | sheen-te | st poolth | د |
| _ | ATTPT. | -3 | | | | |
| _ | 9-5- | 25' le | 1 | | | |
| | | No Per | | 1 0 | | |
| | 18-15 | | | | heer to | |
| - | | | POS1+1 | 12 T + H |) poe - f | · · · |
| - | | | progr | c+ 1/53, | 5.6 | |
| - | 1 1. 1 | 1 - 1 - 1014 | | | No soil | |
| | Cam role - | tank pre | nously 1 | W. I VETAV | Dr 12 | |
| - | not eno | uch who | ene to c | ollect | Brall | |
| - | parame | ters to | chee w | rostly g | ravel t | |
| ė. | pea gna | vel (wh | three w | t be use | d'For | |
| , , | analys | is); fre | e produc | t de kch | d, + | |
| A STATE OF | smelle | d @ 10 | -15' de | pu, po | situe | |
| | Sheen | Hest. | | | <u> </u> | |
| | Plani | s to ho | we DP- | 02 relo | cated, | |
| | and a | allemp | taga | en next | Thurs, | |
| | | 24,200 | 90 | | | |
| 2 Kr - 200 | · · | | | | | |
| 10.00 | | | | | | |
| a deliver | | | | <u> </u> | | |

· Date of Manager Comments

| Sept. 17, 7909 | Sept. 17 2000 |
|--|---|
| SOIL DESCRIPTION of DROZ | Attempt #2 |
| Attempt # 1 | 0-0.3 Asphelt |
| 0-0.3 Asphalt | |
| | 0.3-5 - 2. Steel of recovery |
| 0.3-5' 2.5 ft of Recovery, hoos- medinyella- | Loose, medium yellow-brown, unstrutiled |
| brown, unstratified, 5.1 ty P-CSAND | SILL, F-C SAND & PEAGRAVEZ, daup |
| & PEAGRAVEZ daup, No odor | NO DOR NO SHEED PIP = 0.0 |
| No sheen P=0=104, howery | (FJ4C) |
| Pto reading rose slowly and was | 5'-18' - Ift of recovery |
| likely caused by mosture contest | hoose medium yellaw-brown, mustralofred |
| of the sample. Mast likely | 5,1+y, F-CSAND, & PEXGRAUEL |
| false prositive Readings | dans, No odor was heen, 120= 00 |
| (F.FLL) | |
| | 157 19-15' 2" of fecology Loose, group |
| 5-10' - 18t of Recovery boose, medium yellow | UNSTRATIFIED PERGRAVER FORCE |
| brown, unshatrfred, S, 1ty, t'-c SAND. | Sand, true 5117, TPH apol, sheen |
| & PEA GRAVEL, damp No odor, No shown | Visible, P=0=00 |
| PID = 20,8 again reading roverlooly, | FTV |
| and was Ixely caused by moistur vapor | |
| from sample and not likely a prisiter | Shown test performed on all samples |
| reading. | of soil retrieved at all three loaster |
| | attempts. |
| 10-15 No recovery or splatter 15tod | B12. |
| in bottom of sample steams. | |
| | |
| | |
| | |
| | |

| (Copt. 17 2 W. | D13-11111 200 0 200 |
|--|-----------------------------------|
| DP-02 SCPt. 17,2poq | 013-1646-009 200.05 |
| Attempt #3 | Morday Sect. 21, 2009 |
| 0-013ft Asphalt | Plant 22-31-DaI |
| | W124 51 |
| 0.3ft-5ft 2,5ft of Recovery | 0438 I. Lombods ongsto |
| Hose, Medium ye Mon brown, unstrat. | 9448 T- Sage on site |
| SILTY PIC SAND & PEA GRAVEL, | 0458 Cal 124 PED ROAK=124 |
| dang, Nooder, Nosheen, PIO=00 | 10455 Styred dun Heath |
| (FJLL) | a sattery adding we had |
| 7.5 | A project of and project |
| 5ft-10ft No Perovery only tree amount | public roudings |
| of frem whom solutioned sheem on tampher | |
| 1954 - 1584 1.5ft & Recovery | 1814 Beyon 300 otherst of |
| hoose gray unstrututed peagran | Per OP-44 |
| truce f-m soud, taces, It, TPH | Driller successfully pushed |
| odor, Visible steen a oil ensample. | To 15 begs with the LA |
| 7=0=0:0 FILL | 50mple collected à layges |
| of the state of th | 1 super toller to 2 agger |
| 1515 Pump, A cutting mast exact designated | \$525 DMIer of DP-44 and mobe |
| disposed at what | to Next locator |
| 1535 7 Sager I. Lamberts off 550 | |
| 1575 h 199 2 Palmer of Order | OAT - Catined loging of DR XX |
| | 50.1 |
| | 18545 Recal PID Peak 75 Called to |
| | 100 |
| | |
| | |
| | |

ļ~,

Sept 21, 2009 (Conti)
0600 GAI moving 50.1 allections logging
Antion to worth corner of 5170 Sept 21,2009 (cod) 1721 Record PED MAX Ready 108 All equyment do cond who Aconox between DP-Locations & Sample DP 20 Casade had dilled 177-20 \$62\$ 9915 Take control Services will not be to 15' GAT wan In Lu Servan at unt 11 11PM (scheduling prostern) Lo epa gjate n N. Coven of 231-07-13 & 2-31-07-14 annot be diles site was we will get up for unt 1 TCS has set up planel to the control me rest of he day. DBUY Drile ground over samples Com Soil sample List 2-31-DP-44 Logges Sul, PID= Time IDH めめ 0528 2-31-09-44-01-5-0 0712 DP-19 Stat pros 2 DP-19 end at 1+ 4057 2-31-DP-44-84-5-8 Digo 0530 D.70 0535 2-31-DP-44-89-5-0 hale at due do pengroval Fill Grand rave Hed in on itself DP-28 2-31-PP-24 pl 5-2 DP-23 Songles collected from 0-5'sleave Ø 798 2-31-DP-29-81-5-8 D. 8 and ont on hold. W.M. off to 8711 7-31-09-27-01-5-4 Ø.0 reday hole at later date , Loygea Sil recovered will not open to by the hole remains the successfull, 2-31-09-20-04-5-0 D. 3 8799 8. B 2-31-DP-28-89-5-8 8725

Sept. 21 249 TC5 called Sand new world be Cleans - Soil Stagny are to order in about 1/2 hors. Soil Somple ID LOST 1226 TCS observed settly up trate Control party of 16h Ave. DP= 19 Somple IDH Time PIDZ Horn 2-31-DP-19-01-5-0 0.0 0748 \$ 75p 2-31-DP-19-04-5-0 D.9 HOLD NV Concrete cuttary corny road wary at 2-31-DP-13 hocastron (250 DR-13 1334 2-31-17-13-01-5-0 1336 0-0.4 Asphal 2-31-BP=13 Z-31-DP-13-01-5-4 [337 2-31-DA-13-04-5-0 0.4-1.0 Carette 1342 1.0-1.6 convetu 2-31-DP-13-189-5-18 DP-14 1388 Cascade moberny to DP-13 2-31-DP-14-01-50 1912 1414 Z-31-DP-14-04-5-0 NEW CC COM DR-14 D-0,5 ASPINI DIS-1111 COURTS (310. 2-31-DP-14-09-5-8 1422 laquade be yn prish pt DP-13 1313 1400 Manhents + T. Sager offsite Coscade begin push of DP-14 1331 Log D8-13 [DP-14

| 6000 Cloney Ø 13-1646-009.200.85 | |
|--|---------|
| 2-31 DGT 912212009 013-1646-009.200.05 2-31 DWI Sept 24, 2009 | - |
| 1 to the set to country set to count | 2 |
| 2900446. 4050 1.5ager & 3. Lawrence 15 003. | 4 |
| weather: warm, sunny 70°C 864\$ Pick-up eguipmet. | |
| Health + Safety touched base with Mike L., Will call him before leaving to ensure 2705 Cal. Pto reak = 190 Cal +1 | to |
| | |
| that all went well + safely while 07 15 Sel-up for re-2011 (2 udatlasof | of |
| | |
| | 1.5 |
| Chair of custody Chair of custody 1000 Pichedup new soil drum for parttings 1000 Pichedup new soil drum for parttings | able of |
| 5000 FICHER UP 1640 SOTI - 2900447 - | |
| from 9/21/2009. 2900447. 1030 Collected Sample 1230 Collected Sample 1230 Collected Sample 1240 Anno down | counted |
| 231-2-100 1-10 70010 | |
| I I dhelleddrin he aboutined out moved in | 47 |
| Collected for MCs, Netals, Total grantes "87" to the west. | 3 |
| Cyanide, PCBS, TPH-Gx, IPH-Dx) | |
| SVOCS, SIMPAHS TO Solids 9744 DR-19 3.2 attempt Successful to 15ft | |
| | |
| 1130 J. Lamberts offsite M. Lymphin contacted 2832 PTD mar Fundroning | |
| Jul L. attending to recaliba | Are |
| | |
| 150 9/22/09 morns to Next 1 section | |
| | |
| | |
| | |

~

| | 1055 Real PED Red 101 cn (+100 |
|---|--|
| OBSH Call Tred Mores at AMMEX | Ecsoéd |
| | |
| 10920 J. Lanberts off sity to Labin Fukurla | 1(00 Panue D+02 15'-7) |
| to pretering add, And somple bottles | |
| | 1230 Constated Loggen DP-DZ to 45' PID Readings on |
| 0435 START Rish of DP-B2 4h Mapt | DP-19 & DP-\$2 For PD |
| 2st Decarey List 584 | Beyn clear up of 50.1 50mpling & |
| n 3" recovery 5-16ft | Logging orea. |
| medun slue bran sil (1-C Sano, | |
| 1. the f. M grand, doup. | Dop oft sail rulo drug |
| | |
| Called Todd about 120 he said | Soil Sample ID List |
| Shall celibrate greset with | DP-19 Sample IDH PID |
| new truce of Cal. GAS. | 0752 2-31-DP-14-01-5-0 00 0754 2-31-DP-19-64-5-0 00 |
| DP-02 New lower 5th Attempt | 0754 2-31-DP-19-64-5-8 P.0 0759 2-31-DP-19-69-5-8 D.8 |
| DP-DZ New (swith 3 MAZMO | |
| - N287 recon 0-584 | DP-02 2-31-0P-02-01-5-0 00 |
| ~2ft recovery 5-10ft | 10072-31-08-02-04-5-0 80 |
| peagravel at his ares nempto | 1018 2-31-DP 02-09-5-0 00 |
| | |
| appars to be Steen at 1211st | 1340 TSaga efficie |
| | |
| | |

~

| | The state of the s |
|---|--|
| 19/28/09 Boging 2-31 DG1 013-1646-009-200-05 | |
| 0700 J Lamberts onsite to sample waste drums Weather - clear, 50F, for soil + concrete Health - Safety - drum sampling, pinch points, Chemical hazards | an worser dusing structural 21/01 |
| 0730 Prepare equipment, bottles, 0755 Collect Soil sample from drum 2900 447 Sample 10: 231-2900 447 | |
| parameters: VOCs, metals, CN, SVOCs, SIM PAHS, NWTPH-B, NWTPH-Dx, PCBS, 20 Solids | |
| 0811 Collect liquid fraction concrete slumy Sample from drum 2900519 sample 10: 2-31-2900519 - Liquids | |
| parameters: VOCs, RCKA Metods, Total Cov, pH 0825 collect solid fraction concrete slumy | |
| Sample from drum 2900519 Sample 10: 2-31-2900519-Solids Parameters VOCs, RCRAMETALS, Total CN, PHI To Solids. | |
| 0900 Band + palletize remaining drums. Notify. J. Plaherty + J. Parsons. 1000 Cleanup, J. Lamberts of feite to lab. | |
| | |

· \5

| Dr Rum1D# 900447 | um Log Date Sturt 9/21/2009 | ed Lo 7 DP-1 DP-1 | ention 9,DP-20 3,DP-1 | Contents Soil | Cuthings-dry | Banded? | In2-44 Y | ? Sample 9/28/0° | ed?. | Sample ID - 2900447 @75 | 5 |
|------------------------|-----------------------------------|-------------------------|-----------------------------|------------------|--------------|---------|-------------|---------------------|------|-------------------------------|---|
| | | DP- | +4,DP-0 | 02 | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | i | | | | | |
| | • | | | | | : | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | · | | | | | |
| | | | | | | 1 | | | | | |
| | | | | | | | 5 | | | | |

The Control of the State of the

| Drum Log Drum 10# Date Started Location Contents: Branded? Moved to 244 Sampled? 2900432 8124109 PL2-507C Soil-dry cuttings 2900433 8124109 PL2-507C Soil cuttings-leet 2900434 8124109 PL2-507C Soil cuttings-wet 2900435 8124109 PL2-507C Soil cuttings-wet 2900436 8124109 PL2-507C Soil Cuttings-wet 2900436 8124109 PL2-507C Soil Cuttings-wet 2900437 804109 PL2-507C Soil Cuttings-wet 2900438 812509 PL2-507C Soil Cuttings-wet 812609 PL2-507B Soil Cuttings-wet 2900438 812509 PL2-507B Soil Cuttings-wel 2900440 812500 PL2-507B Soil Cuttings-wel 2900440 812109 DP-38 V Soil Cuttings-wel 2900440 DP-38 DP-48 DP-38 V Soil Cuttings-wel 2900440 DP-38 DP-48 DP-38 V Soil Cuttings-wel 2900440 DP-38 DP-48 DP-38 V Soil Cuttings-wel 2900440 DP-38 DP-48 DP-38 V Soil Cuttings-wel 2900440 DP-38 DP-48 DP-38 V Soil Cuttings-wel 2900549 DP-38 DP-48 DP-35 DP-44 DP-38 V P-45 V P-35 DP-44 DP-38 V P-45 V P-35 DP-44 DP-50 V P-36 DP-46 DP-46 DP-46 DP-46 DP-46 DP-46 DP | 1 |
|--|-----------|
| Drum 12# Date Started Location Contents. 2900432 3124109 PL2-507C Soil dry. cuttings 2900433 8124109 PL2-507C Soil cuttings-leet 2900434 8124109 PL2-507C Soil cuttings-wet 2900434 8124109 PL2-507C Soil cuttings-wet 2900436 8124109 PL2-507C Soil cuttings-wet 2900436 8124109 PL2-507C Soil Cuttings-wet 2900437 8124109 PL2-507C Soil Cuttings-wet 2900438 8125/09 PL2-507B Soil Cuttings-wet 2900438 8125/09 PL2-507B Soil Cuttings-wet 2900438 8125/09 PL2-507B Soil Cuttings-wet 2900430 8125/09 PL2-507B Soil Cuttings-wet 2900440 8125/09 PL2-507B Soil Cuttings-wet 2900440 8125/09 PL2-507B Soil Cuttings-wet 2900440 8121/09 DP-33 N-07-07-07-07-07-07-07-07-07-07-07-07-07- | :\ |
| Drum 1 Dt Dale Started Location Contents 2900432 8124109 PL2-507C Soil-dry. cuttings 2900432 8124109 PL2-507C Soil cuttings-bet 2900434 8124109 PL2-507C Soil cuttings-bet 2900434 8124109 PL2-507C Soil cuttings-wet 2900436 8124109 PL2-507C Soil cuttings-wet 2900436 8124109 PL2-507C Soil cuttings-wet 2900437 8124109 PL2-507C Soil Cuttings-wet 2900437 8124109 PL2-507C Soil Cuttings-wet 8/2409 PL2-507B 2900438 8125/09 PL2-507B 2900438 8125/09 PL2-507B 2900438 8125/09 PL2-507B 2900439 8125/09 PL2-507B 2900440 8125/09 PL2-507B Soil Cuttings-wet 2900440 B125/09 PL2-507B DP-40 DP-38 DP-47P-32 DP-41V DP-34 DP-28 DP-47P-32 DP-41V DP-49 DP-29 DP-34 DP-35 DP-41V DP-44 DP-38 V DP-49 DP-29 DP-34 DP-50 V 231-29005/14-1940 PA128/109 2-31-29005/14-1940 PA128/109 2-31-29005/14-1940 PA128/109 2-31-29005/14-1940 PA128/109 2-31-29005/14-1940 | : |
| 2900432 8124109 PL2-507C Soil-dry. cuttings 2900432 8124109 PL2-507C Soil cuttings-wet 2900434 8124109 PL2-507C Soil cuttings-wet 2900434 8124109 PL2-507C Soil cuttings-wet 2900436 8124109 PL2-507C Soil cuttings-wet 36/26/09 Y 2-31-2900435 2900437 824109 PL2-507C Soil Cuttings-wet 8/26/09 PL2-507C Soil Cuttings-wet 8/26/09 PL2-507C Soil Cuttings-wet 8/26/09 PL2-507C Soil Cuttings-wet 2900438 8/25/09 PL2-507C Soil Cuttings-wet 2900438 8/25/09 PL2-507C Soil Cuttings-wet 2900439 8/25/09 PL2-507C Soil Cuttings-wet 2900439 8/25/09 PL2-507C Soil Cuttings-wet 2900440 8/25/09 PL2-507C Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900440 PC-2507C PL2-507C Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 2900436 PC-2507C PL2-507C SOIL Cuttings-wet 2900437 8/25/09 PC-2507C PL-2507C PL-2507C PC-2507C PL-2507C PC-2507C |
| 7900433 8124109 PL2-587C Soil cuttings-wet 2900434 8124109 PL2-587C Soil cuttings-wet 2900434 8124109 PL2-587C Soil cuttings-wet 3900436 8124109 PL2-587C Soil cuttings-wet 3900436 8124109 PL2-587C Soil cuttings-wet 3900437 8124109 PL2-587C Soil cuttings-wet 3900437 8124109 PL2-587C Soil cuttings-wet 3900438 8125/09 PL2-587C Soil cuttings-wet 3900438 8125/09 PL2-587B Soil cuttings-wet 3900439 8125/09 PL2-587B Soil cuttings-wet 3900439 8125/09 PL2-587B Soil cuttings-wet 3900441 8131109 DP-35 Soil cuttings-wet 3900441 8131109 DP-35 Soil cuttings-wet 3900441 8131109 DP-35 Soil cuttings-dry 3900441 8131109 DP-35 DP-34 DP-38 Soil cuttings-dry 3910/09 @1815 3912809 P-29-09-29-09-29-09-09-09-09-09-09-09-09-09-09-09-09-09 | |
| 2900434 8124109 PL2-507C Soil Cuttings-wet 2900436 8124109 PL2-507C Soil Cuttings-wet 2900436 8124109 PL2-507C Soil Cuttings-wet 2900437 8124109 PL2-507C Soil Cuttings-wet 8124109 PL2-507B 2900438 8125/09 PL2-507B Soil Cuttings-wet 2900438 8125/09 PL2-507B Soil Cuttings-wet 2900439 8125/09 PL2-507B Soil Cuttings-wet 2900440 8125/09 PL2-507B Soil Cuttings-wet 2900441 8131109 DP-35 / Soil Cuttings-wet 7900441 8131109 DP-35 / Soil Cuttings-wet DP-06/ DP-03/M-07-DP-31/ DP-34/ DP-34/ DP-38/ DP-49/ DP-29/DP-32/ DP-35/ DP-44/ DP-38/ DP-45/ DP-49/ DP-29/DP-32/ DP-35/ DP-44/ DP-38/ DP-45/ DP-49/ DP-29/DP-32/ DP-50/ 29128109 231-29/00519- Liquid 79128109 231-29/00519- Liquid 79128109 231-29/00519- Liquid | |
| 2900434 8124109 PC2-507C Soil Cuttings - wet 2900436 8124109 PC2-507C Soil Cuttings - wet 2900436 8124109 PC2-507C Soil Cuttings - wet 2900437 8124109 PC2-507C Soil Cuttings - wet 812409 PC2-507B 2900438 2125/09 PC2-507B Soil Cuttings - wet 2900438 2125/09 PC2-507B Soil Cuttings - wet 2900439 2125/09 PC2-507B Soil Cuttings - wet 2900439 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900440 2125/09 PC2-507B Soil Cuttings - wet 2900438 2125/09 PC2-507B Soil Cuttings - wet 29004 | |
| 2900436 8/24169 PL2-567C Soil Cuttings-wet 2900437 8/24169 PL2-567C Soil Cuttings-wet 8/24109 PL2-567B 2900438 8/25/09 PL2 567B 2900438 8/25/09 PL2 567B 2900439 8/25/09 PL2 567B Soil Cuttings-wet 2900439 8/25/09 PL2-507B Soil Cuttings-wet 2900440 8/25/09 PL2-507B Soil Cuttings-wet 7900441 8/31/09 DP-33 Soil Cuttings-wet 7900441 8/31/09 DP-33 Soil Cuttings-wet 7900440 DP-03/DP-03/DP-04/DP-34/DP-43/DP-45 | • |
| 2900437 804/69 PL2-587C Soil Cuttings-wet 8/25/09 PL2-587B 2900438 8/25/09 PL2-587B Soil Cuttings-wet 2900438 8/25/09 PL2-587B Soil Cuttings-wet 2900439 9/25/09 PL2-587B Soil Cuttings-wet 2900440 8/25/09 PL2-587B Soil Cuttings-wet 7900441 8/3/109 DP-33 / Soil Cuttings-wet 7900441 8/3/109 DP-33 / Soil Cuttings-dry DP-36/ DP-03/DP-07/DP-31/DP-32/ DP-34/DP-38/ DP-48/ DP-49/ DP-29/DP-31/DP-35/DP-41/DP-43/DP-45/ DP-40/ PP-29/DP-31/DP-35/DP-41/DP-43/DP-45/ DP-40/ PP-29/DP-31/DP-50/ 8/21/29005/9-Liqui | |
| 8/25/09 PL2 567B 2900438 3/25/09 PL2 567B Soil Cuttings-wet 2900439 3/25/09 PL2 567B Soil Cuttings-wet 2900439 3/25/09 PL2 567B Soil Cuttings-wet 2900441 8/31/09 DP-38 Soil Cuttings-wet 7900441 8/31/09 DP-38 Soil Cuttings-dry 50-36 DP-03/DP-07/PP-31 DP-32 DP-34 DP-48 DP-49 DP-28 DP-47 DP-32 DP-41 DP-34 DP-38 DP-45 DP-49 DP-29 DP-3+36 35 DP-41 DP-43 DP-45 DP-40 PP-25 DP-24 DP-50 V 231-2900519-liqui 79/28/09 2-31-2900519 Soil Cuttings-wet 231-2900519-liqui 231-2900519-liqui | 7. |
| 2900438 2/25/09 PL2 507B Soil Cuttings-well 2900439 2125/09 PL2 507B Soil Cuttings-well 2900441 2125/09 PL2 507B Soil Cuttings-well 7900441 2121/09 DP-33 / Soil Cuttings-well DP-06/ DP-03/DP-32 / DP-05/DP-34 DP-48/ DP-36/ DP-28/DP-47-52-04/DP-11/ DP-24/DP-38 / DP-49/ DP-29/DP-32/DP-43/DP-43/DP-43/DP-43/DP-45/ DP-49/ DP-29/DP-32/DP-50 / DP-49/ DP-29/DP-35/DP-43/DP-43/DP-43/DP-45/ DP-40/ DP-29/DP-35/DP-50 / DP-40/ DP-29/DP-35/DP-50 / DP-40/ DP-29/DP-35/DP-50 / DP-40/ DP-35/DP-29/DP-50 / DP-40/ DP-35/DP-29/DP-50 / DP-40/ DP-35/DP-29/DP-50 / DP-40/ DP-35/DP-29/DP-50 / DP-40/ DP-35/DP-35/DP-50 / DP-40/ DP-35/DP-35/DP-35/DP-45/ | <i>T.</i> |
| 290439 9125109 PL2-507B Soil Cuttings-well 290440 8125109 PL2-507B Soil Cuttings-well 7900441 8131109 DP-38 / Soil Cuttings-dry DP-06 / DP-03 / DP-07 / DP-38 / Soil Cuttings-dry DP-36 / DP-03 / DP-07 / DP-31 / DP-34 / DP-48 / 9/10/09 @1813 DP-49 / DP-29 / DP-37 / DP-41 / DP-43 / DP-45 / DP-40 / DP-29 / DP-34 / DP-50 / DP-40 / DP-29 / DP-36 / DP-50 / DP-40 / DP-35 / DP-36 / DP-50 / 231-2900519-Liqui | |
| 2900440 8/25/09 PL2-507B Soil Cuttings-well 7900441 8131109 DP-33 / Soil Cuttings-well DP-66/ DP-03/DP-07/DP-31/DP-35/DP-34/DP-38/ DP-36/ DP-28/DP-47/DP-32/DP-32/DP-43/DP-43/DP-43/DP-45/ DP-49/ DP-29/DP-37/DP-35/DP-43/DP-43/DP-43/DP-45/ DP-49/ DP-29/DP-34/DP-50/ DP-49/ DP-29/DP-34/DP-50/ DP-49/ DP-29/DP-34/DP-50/ 231-2900519-Liquid 79/28/109 2-31-2900519 | |
| 2900440 8/25709 PLZ-507B Soil Cuttings-well 7900441 8131109 DP-38 / Soil Cuttings-dry DP-06/ DP-03/DP-38 / Soil Cuttings-dry DP-36/ DP-03/DP-32/ DP-32/ DP-34/DP-38/ DP-36/ DP-28/DP-47-58-04/DP-11/ DP-24/DP-38/ DP-49/ DP-29/DP-32/DP-45/DP-43/ DP-43/ DP-45/ DP-40/ DP-29/DP-35/DP-26/DP-50/ DP-40/ DP-25/DP-26/DP-50/ 8/22/09 2-31-2900519 | |
| 7900 441 843 109 DP-33 Soil Cuttings-dry DP-06/ DP-03/ DP-31/ DP-34/ DP-34/ DP-48/ DP-36/ DP-28/ DP-32/ DP-32/ DP-34/ DP-38/ DP-49/ DP-29/ DP-37/ DP-35/ DP-43/ DP-43/ DP-45/ DP-46/ PP-25/ DP-26/ DP-50/ DP-46/ PP-25/ DP-26/ DP-50/ 231-2900519- Liqui | 1 |
| DP-06/ DP-03/DP-32/ DP-34/DP-34/DP-38/ DP-36/ DP-28/DP-47/DP-11/ DP-24/DP-38/ DP-49/ DP-29/DP-34/DP-43/ DP-43/ DP-45/ DP-46/ PP-25/DP-26/DP-50/ 231-2900519- Liqui | |
| 79/28/109 2-31-29 005/9 | |
| 79/28/109 2-31-29 005/9 | |
| 79/28/09 2-31-29 005/9 | 31 |
| 79/28/09 2-3/- 29 005/9 | uids |
| W V 11 12 12 12 12 12 12 12 12 12 12 12 12 | 9 |
| | 3 |
| 1 50 -10 applies 2-31 Converte Glasses O(Fe 1-2) V Y 9/10/09 2-31-2 400518-Ligh | iquids |
| 7900 445/913/09 23) BCB Concrete Con ex Q-31 4 17 N/A. | |
| 8127/09 ist. | |
| 2900446 9/10/09 Op. 22 7 DP-14, OP-17 Soil Cutting-dry Y 9/10/07 2-31-2900446 | |
| Z 100470 1710/01 OF 22 DP-16 OF Conting org | |
| DP-21 DP-39 DP-18, DP-10, DP-12/ | |
| DP-23 DP-01 DP-08 DP-09 VDP-47 DP-23 VDP-01 DP-08 VDP-09 VDP-47 DP-15 DP-15 DP-13 DP-14 | |
| DP-15/ DP-13 DP-13 DP-14 | |
| DP-30 | |



"Rite in the Rain" ALL-WEATHER LEVEL No. 310

Boeing Plant 2
2-31 Data Gaps
013-1646-009.200.

| <i>?</i> | 1 | | |
|----------|---|---------------------------------------|---|
| | | | 10/1/2009 2-31 Data Gaps 0/3-1646 009. 200.05 |
| | | | 0645 Stamperts (Golder on site) |
| | | | 550F cloudy |
| | | | To perform aw sampling as part |
| e e | C | | of 2-31 06 I. |
| ÷ | | | Gather up equipment, b. Her, etc |
| | | · · · · · · · · · · · · · · · · · · · | 0705 J. Bernthal (EPI) on sik |
| | | | 0715 K. Addis (EPI) on site |
| | | , | |
| | | | 6736 Setupat PL2-502A to collect water |
| | 4 | | Sample 2017 |
| | | | 0842 Take Sample 2-31-PL2-502A-W-8 |
| | | | 0900 Healthe Safety into-ego protection, |
| | | | - IPE, glaves, slips trups talk |
| | | | heavy lifting. |
| | | | 1280 Move to PLZ-503.4 to collect |
| | | | water sample |
| | | | 1254 Take water sample 2-31-PL2-50314-WB |
| | | | 1410 coc signed from 12. Addis to J. Lambert |
| | | | 1430 K Addist J. Bernthal offeite. |
| | | | 1430 I camberts offsite to ARI lab. |
| | | | |
| | | | 18/ 10/1 /09 |
| | | _ | |
| | | | |
| | | | |
| | | • | |
| | | Ti. | |

•

2-31 Dota Gaps Investigation 013-1646 009. 200.05 J. Lamberts (Golder) onsite 534 Overcast To perform GW sampling as part 1 2-31 DGI Gather up : quipment, bottles, ct K Addis (EPI) onsite 0705 Move to PL2-501A, to collect water sample 0730 H+S Meeting: slipstrips Palls, traffic catery, PPE, gloves, eye protection, heavy lifting Collect Sample 2-31-P12-501A-W-D 0910 more to PL2-501B, to collect 1000 water sample Collect sample 2-31-PL2-501B-W-0 Move to PLZ. 501C to collect 1150 water sample Collect sample 2-31-PLZ-501C-W- \$ 1245 COC signed from K. Addis to J. Lamberts. 1400 I cambak of faite to late 1410 K Addis of Serte 130 I compart onsite to clear up 1430 equipment 1. Lamberts offsite 1500

| 60/5/09 231 DGI | 213-1644 009, 200, 25 |
|--------------------------|------------------------|
| 0650 J. Lemberts (Golde | r) on site |
| 53 F cleur. | |
| To per form GW sam | pling as partof |
| 2-31 DGI | |
| - 0700 Gather up aginip | ment hattles etc |
| K Addis (FOT) and | bo 10 ml 10 50.2) |
| | ite, J. Birnthall EPI) |
| - ofto His motor i dinci | tries falls, DPE) |
| - 540 HIS mtg islips | |
| | from theavy lifting |
| Move to fl2-51 | 09A+Pi2.509B |
| _ to collect water. | sample. |
| 0839 Collect sample | 2-31-PL2-509A-W-0 |
| 0850 Collect sample | 2-31-p22-509A-W-1 |
| 1043 Collect sample | 2-31-PL2-509B W-0 |
| VOCs-no pre | servation |
| 1120 Move to PL2-5 | |
| water sample | |
| 1150 collect sample | 2-31-PL2-504A-W-B |
| 1300 Move to Pla- | 505A to collect |
| water sample. | |
| 1330 Collect samp | 6 231-PL2-565A-W& |
| 1345 Collect comple | 2-31-12-505A-W-1 |
| 1420 Coc signed or | ver to J. Lamberts |
| from K. Addis | |
| 7,000 | |

2-31 DGI 613-1646-009,200,05 10/5/09 1430 J Lamberts of fite to lab K. Addis, J. Bemthal offsite 18/ 10/5/09

10/6/09 013-1646-009.200.05 2-31DGI 0640 Stamberts (GAI) on sife Weather 55F + clear to perform GW sampling as part of 2-31 DGI 0645 Gather equipment bottles etc K. Addis, J. Bernthal EPZ onsite Move to PL2-233A, to collect watersample 0700 H+S mtg: slipstrips falls, chemical safety, PPE, gloves, eye proketion, heavy lifting, traffic safety 1035 Collect sample 2-31-PL2-233A-W-Ø Collect sample 2-31-PL2-233A-10-1 1100 1200 Move to PL2-507B to collect sample Botun 8-10: KAddis offsite to get new parameter meter from IDL. 1300 Collect sample 231- Pla 507 B-W-B 1315 Collect sample 2-31-PL2-507B- W-1 1420 Move to Plá-507A to collect sample 1451 Collect sample 2-31-PL2-507 A-W-0 1500 Collect somple 2-31-12-507A-W-1

| 16/2 K 20 | 2-31 DGI lon's signs coci | 013-1646-009 over to J. Lamber | <u>200</u> 05 |
|-------------|--|-----------------------------------|-----------------------|
| 1015 J. Lam | lon's signs cocc herts off site to la hist J. Bernthal | ib | |
| 1045 J. Lan | but buch onsu | to tocleon up | |
| | | _ | |
| | | | |
| | | - | AI AAAA |
| | | | A COMPENSATION |
| | | | ". J.L. DAF |
| | | | L DARLING CORPORATION |
| | | | ORATION ain.com |
| | | | |
| · | | | |
| | | | |
| | | | |
| | | | |
| | | | No. 314 |

•

,

,

.

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

SIGNATURE PAGE

| Name (Print) | Signature | Date Con | pany/Affiliation |
|---|---------------|------------------|------------------|
| Kristin Addis | Kyst J. Add | | EPT |
| Doug Kunkel | Dofos 9linke | 8/24/09 | EPI |
| Led Norton | - liftheta | 8/24/09 | GAZ |
| Kerry Lamphen | - they liften | - 8-24-09 | CIT |
| Jeremiah Jenki | | 8-24-09 | |
| Jed L. SAGOR | 13 eum fo | 22 8-74- | |
| JIIIamberk | Jul Pay 16 | 8-24- | 04 60140 |
| $\Lambda \Lambda \cdot \hat{\beta} = \Lambda \Lambda$ | 10 John Jan | S-24-09 | |
| Joe Flaherty | In Marie | ph 3-74-09 | |
| Evic Holliday | End I | 8-24-09 | Decirie |
| Josh Burth | 11-6 | 8/31/09 | |
| Jill Lamberte | Jall Remille | 4 8/31/09 | GAI |
| Ted Sager | Jul S. | 8/3/109 | Golder |
| DALKSON 19 | | 8-31-09 | |
| Joe Floren | point to | 8-31-09 | Cascade |
| Joe Flaherty | - Ja 3/3- | 8:31-09 | Boeing |
| SACKEDN KA | har | 9-1-09 Chi ma | Boeing |
| Elight Floyd | For Fly | 9-1-09 | (0) |
| Jed Sager | Maryd | a . | COI |
| Jillamborg 1 | Jelle C | | 5. Her |
| Josh Buthol | 0140 | 9-1-09 | GAL |
| Jill Lamberts | Sell-Sello | 9-2-09 | Golder |
| | 0 | | Civiler |

Alterment C. Health & Lakety Front to 2 (i) I was then the management throughout I, health Turket, transcoper App. 2004

SIGNATURE PAGE

I have read the Heath and Safety Flan and understand in porterly in the safety flant flant flant flant flant flant flant flant services and delegated attenues it are conditions or has are not specifically designated fig.

| Kenny Lamphen 1/2 32-39 CDT Hillambers 1/2 25-39 CDT Jillambers 1/2 25-39 Colder Tro Sager John 8-25-09 Golder Kistin Adds Right Johlis 8-25-09 ETT Jar Flyns 1/2 1/2 5PT Jor Flyns 1/2 1/2 1/2 6010 Elijots Third CL Flyd 2/2/09 CDT Josh Bank 1/2 1/2/09 Golder Elijots Third CL Flyd 2/2/09 CDT Josh Bank 1/2 1/2 Golder Elijots Third CL Flyd 2/2/09 CDT Josh Bank 1/2 1/2 Golder Elijots Flys Suf Flord 1/2/09 Golder Elijots Flord CL Flyd 2/2/09 CDT Loon Bank 1/2 1/2 Golder Elijots Flord 1/2 1/2 1/2 Golder Elijots Flord 1/2 1/2 1/2 Golder Elijots Flord 1/2 1/2 1/2 Golder Elijots Flord 1/2 1/2 1/2 1/2 Golder Elijots Flord 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 | Name (Print) | Signature | | Company/Attitution |
|--|--|--|--|--|
| Andy Flagan F-25-08 CDT JIMLambets Sylfonin 8-25-09 Golder Tob Sager Affic 8-25-09 Golder Kristin Addin Rift Allis 8-25-09 ETT JOSEL BOAM JAPO 9/2/07 EPT JOSEL BOAM JAPO 9/2/09 EPT JOSEL BOAM JAPO 9/2/09 GOLDE Flight Flag CA Find 9/2/09 CDT - undert Hilland 9/3/09 GAL Took Boam 9/3/09 FPT Let Sager Alland 9/3/09 GPT Let Sager Alland 9/3/09 CPT Let Sager Alland 9/8-09 EPT Kasar Gell 79 9-8/09 COT Lever Golder Let Sager Golder | Steve Stivers | St the | 8 2509 | CDT |
| Jillambelts Jeffer 8-25-09 Golder Tro Sosse Jeffer 8-25-09 Grelder Kristin Adds Rept. J. Allis 8-25-09 EPI JACKINNA APPO 9/2/09 EPI Jos Flahr of Jeffer 9/2/09 Golder Elizar Than Cir Final 9/2/09 Golder Elizar Than Cir Final 9/2/09 CDI Jest Saser Jeffer 9/3/09 EPI 182 Saser Jeffer 9/3/09 Golder Elizar Frogs Sur Flores 9/3/09 Golder Elizar Frogs Sur Flores 9/3/09 CPI Kristin Addis Rot J. Addis 9-8-09 EPI Lang Golder 19 9-8/09 CDI Lynn Golder 19 9-8/09 CDI Lynn Golder 19 9-8/09 CDI Lynn Golder 19 19 19 19 19 19 19 19 19 19 19 19 19 | Kerry Lamphen | gh January January | 8-25-59 | andrilling and the second seco |
| Tro Sager Sept Supply 8-25-09 Golder Tro Sager Supply Supply 8-25-09 Gradder Kristin Addis Tuft I fills 8-25-09 EPI JACKS/NKY AND 1/2/09 EPI Jos Flynsty July 1/2/09 Golder Elijot Third Child 9/2/09 COI Josh Bonkl May 1/2/09 Golder Elijot Ford Supply Golder Elijot Ford Supply Golder Elijot Ford Supply Golder Elijot Ford Supply Golder Elijot Ford Supply Golder Elijot Ford Supply Golder Elijot Ford Supply Golder Kristin Addis Just July 9-8-09 EPI Kasy Gold John July 9-8-09 COI LANGER GOLDER LANGER | Andy Flagan | | 5-25-09 | construction and the second second |
| Right Addis The John Addis Joseph John School British Section Joseph Brown Ted L. Sager Land 9/2/09 CDI Thinker Child 9/2/09 CDI Joseph Robert State 9/3/09 FPT Jed Sager Land 9/2/09 Golder Flight Florid State 9/3/09 FPT Jed Sager Land 9/2/09 CDI Jed Sager Land 9/2/09 CDI Jed Sager Land 9/2/09 CDI Jed Sager Land 9/2/09 FPT Jed Sager Land 9/2/09 CPI Jed Sager Land 19/2/09 CPI Jed Land 19/2/09 CPI Jed Sager Land 19/2/09 CPI Jed Sager COI Jed Sager C | | Jefama | 8-15-09 | Golden |
| Kristin Addis Test J. Allis 8-25-07 ETI JACKSON RADIO TOPO 9/2/09 CDI Joseph Bankon 1/2/09 Golden Fled L. Sager Land 9/2/09 CDI Flight Third Chi Find 9/2/09 CDI Joseph Bankon 9/2/09 CDI Joseph Bankon 9/2/09 Golden Elizar Floris Suffron 9/2/09 Golden Elizar Floris Suffron 9/2/09 Golden Elizar Floris Suffron 9/3/09 EPI LEUS AND Suffron 9/3/09 CDI LEVAN KEV 9-3-09 Boeing Kristin Addis Suff J. Addis 9-8-09 EPI LAND GODE TOPO 9-8/09 CDI LA | Tto Sage | J. J. Su | 8-25-09 | announced La Eddler |
| Jos Flanch Jos Flanch Jos Flanch Jed L. Sager Florid Flor | Kristin Addis | | | The state of the s |
| Jos Flaherty Jos Flaherty Jose Flaherty Jose Flaherty Lasy Gell Lynn Cobx Langer Lynn Langer Lynn Langer Lynn Langer Lynn Langer Lynn Langer Lynn Langer Lynn Langer Lynn Langer L | JACKSANA | much an union from from the plant of the second of the sec | The state of the s | Company of the Compan |
| Teal. Sager That allog 661ce Elijah Flija Cli Fligal 9/2/09 CDI Involverts Julian 9/3/09 GAI Took Beith Allow 9/3/09 FPT Elijah Floyd Stat Flood 9/3/09 CPI HEVER KEY Joe Flahert Je 9-3-09 Boeing Kristin Addis List J Addis 9-8-09 EFT Lawy Cobit Typh Julia 9-8-09 CDI JANA COBIT Typh Polyman 9-8-09 CDI JANA CO | | ini ini alaman da da da da da da da da da da da da da | A TOTAL PROPERTY OF THE PROPER | COLARIFE COLORA AND COLORA COL |
| Elijoh Flija Chilosof 2/e/09 CDI I-sunterts Julian 9/3/09 FPT Josh Benkl 2/154 9/5/09 FPT LL Sager Surface 913/09 CPI LEIJA Floyd Surface 913/09 CPI LEIJA Floyd Surface 9-3-09 Boeing Kristin Addis List Jaddis 9-8-09 EPT Luxu Cobit 19 9-8-09 CDI | NACTAL CONTRACTOR CONTRACTOR INSTITUTE CONTRACTOR AND ADMINISTRATION OF A TAX A SELECT OF | nazioni in anti fazione fazione fazione del proprieta de la compania de la compania de la compania de la compa | CONTRACTOR OF THE PROPERTY OF | COST - NEW TOWNS COST AND RESIDENCE AND RESI |
| Tesh Be. Mel July 193189 GAF Tesh Be. Mel July 193189 GAF Eliza Fleyd Eliza Galler Eliza Fleyd Eliza Galler Liza G | (<i>)</i> | J. D. J. | Commence of the Commence of th | CO DESCRIPTION OF THE PROPERTY |
| Tesh Be.All Plans Be.All Pla | <i>U</i> | Eth Ployd | marting the second of the seco | MICHAEL CANNON MATHEMATORI CONTINUE MEN MEN SEE TO CONTINUE CANNON CHARACTER CONCINUE DAMES AND ALLER AND |
| Elisa Floyd State of John 9/3/09 CPI Joe Flaherty A Jaddis 9-8-09 EPI Kristin Addis Last J Addis 9-8-09 EPI LANGE Gell JAMES JAMES 9-8-09 CPI LANGE GELL JAME | 1 | Julion Z | | A STATE OF THE PROPERTY OF THE |
| Heller De Flanert Joe Flanert Kristin Addis List Jallis 9-8-09 EPT Lary Cold Lary Co | | | 7/3/09 | THE REAL PROPERTY AND ADDRESS OF THE PARTY O |
| Joe Flahert J. J. 9-3-09 Boeing Kristin Addis Liber J. Addis 9-8-09 EPT LANGE G.C. J. | | man final frame. | | and the second of the Control of the Second |
| Joe Flaherty J. J. J. 9-3-09 Boeing Kristin Addis Libe J. Addis 9-8-09 EPT Lagur G. C. J. | 2 Section 2015 Confidence and accompany of the property of the | DAT Hold | Control Control of the Control of th | Hiller (1905) - Andrick British et amerikan Belikelinga am Sakalah man Kiraling kapadan an |
| Kristin Addis List J Addis 9-8-09 EFT Lasy Gen Lynn 608 to 27 July 9-8-09 CDI JANUARY COLOMBRANCH ARCHITECTURE 1-8-09 CDI 1 | Service Could find the State Service Country and Assessment Assess | and fighter at the grown and | ARTHUR CONTRACTOR BOOK STATE OF THE STATE OF | interational and the second of |
| Lagy C.C. 27 July 9-8/09 (D) I Lagrand Lagrand Lagrand Gold COL | | The State | NOTES COMPANY OF THE PROPERTY OF THE PROPERTY OF THE PARTY | THE PROPERTY OF THE PROPERTY O |
| LAND CONTRACTOR CONTRA | | Rust J Holdis | and a comment of the second o | AND THE PROPERTY OF THE PROPER |
| HAWAUM CHAMPANA 9-5-CG CCI | | versaministri interis di simo flavino mis sen un se municipati internazione inverse inimite internazione. | arminenten anno incressoration de français en mande de cardias: | ranteriore to the transaction to the control of the transaction of the control of |
| 14 WW 101 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | a consister of the Mathematical and in the constraint and the constrai | ation in the analysis of the first factor and the state of the state of the state of the state of the state of | Andre de Marian (1861-1864) de la companya de la co | day of the state o |
| The second secon | Joth My JAM John | Name and Helling for the contraction of the contrac | etitisetelesennen sette et sametele mane anteren van ener | kanga Tangguna ng pilipatan kao ili day ining kanadisan kaliman libon ang ang ang katalan dan ang ang ang ang Tangguna |
| | CILL PORCE (| CX a D D D D D | Management and the second seco | AND THE OWNER WITH THE PROPERTY OF THE PROPERT |
| Gillamberts Quetowl & 9-9-09 GAI | Cill on lant | TOP LOAN AT 1 | artemperatura proprieda de la visco de la visco de la visco de la visco de la visco de la visco de la visco de | THE RESIDENCE OF THE PARTY OF T |
| AND THE RESIDENCE OF THE PARTY | | A STATE OF THE STA | assente companyon as forestean consiste una amenda consum | THE THE THE THE THE THE THE THE THE THE |

SIGNATURE PAGE

| JH16 19/15/109 GHZ | Jun Jannach 3 |
|---|-------------------|
| 0) 60/1/2 | DAY WOSPATE |
| 700 60-11-6 Phy | 7 2H 7 17 |
| JAD 10-10-6 (24) | 10 pos 2 50 1 8 |
| Id 3 30-41-6 | Whish dest |
| IAD 60-41-6 | Day mon !! |
| ID 60-11-60 (DI | F 27 4.13 |
| 100 60-11-6 | N 20620 240 |
| 13 10/11/b | 24 25 XEL |
| 103 5019/12 | Mass real |
| 240 po/11/p | 1 N 000 021 |
| 149 60/01/p | Mary Vall |
| two would care | Spaywo 4/6 |
| IND 601/5 (material) | romofrit |
| TA9 60/6/6 (18/15)// | The Berth |
| 513 60/8/6 JUNION | Joe Borth |
| 19/9/99 Beein | July Thell |
| of fled being | that sol |
| 6/6/6 - 4/6) | 20035991 |
| 6/8/6 | 10005 631 |
| 60/6/6 60/8/6 18/6 18/6 MM COVERS CONTROL MAN CONTROL | Dorrel Harrington |
| WHAT TO THE STATE OF THE STATE | SibbA Aldis |
| IT3 POLF5/8, Will T. Loux | |
| Signature Date Company/Affiliation | (Print) |

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009

SIGNATURE AGE

| Name (Print) | Signature | Date | Company/Affiliation |
|------------------|---------------------------------------|---|---------------------------------------|
| Ald SAGOR | - Nikhi | 4/15/09 | GAI |
| JACKSUR 1/54 | M.C. | 9-15- | -09 (AS(A) |
| Eligh Floy & | Hete tough | 9115-09 | COI |
| Jenniter Parsons | Junifer Frieson | 1 9-15-09 | BOEING |
| Josh Beingh | JUTO. | 9 15.09 | EP7_ |
| Jill Lemberts | July 12 | 9-16-09 | G/Z |
| Tel Sign | Muldes | 9-16-09 | GHI |
| Josh Bornth | HAB | 7/16/09 | 41 |
| JACKSON JUY | /// | V16/05 | CDIM |
| Elici Fland | 11/1/1 | 9/16/09 | CPI |
| /led Sayer | 1 John | 9/17/09 | GAI |
| J-amberts / | Ja Jane | 1117/09 | GAZ |
| He Bornell | 11/2/30 | 9/17/09 | CEI () |
| UTCACHILLY II | //// | 0/-// | a Da |
| | <i>L</i> -' | | · · · · · · · · · · · · · · · · · · · |
| | · · · · · · · · · · · · · · · · · · · | | |
| | | | |
| | | | |
| | | ` | |
| | 1, 1 | | |
| | | | V. |
| | | | |
| | | | |

Attachment C: Health & Safety Plan for 2-31 Area Data Gap Investigation Boeing Plant 2, Seattle Tukwila, Washington April 2009 – Revised September 2009

SIGNATURE PAGE

| Name (Print) | Signature | Date (| Company/Affiliation |
|----------------------------|------------|---------|---------------------|
| 1:11 Campents | Jul Lewler | 9/2/109 | GAI EN |
| Kristin Addis 1ed Sager | he klays | 9/21/09 | GAT |
| Josh Berny Joe Flaherty | J-Alu | 9/21/07 | Boeing |
| JACKEN MY | Set Flord | 9-21-09 | CDI |
| Elin Floyd | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | a | |
| | | | |
| | | | |

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|-----------------------|-------------|-------|-------|--|------------------------------|----------------------|---|-------------|
| TripBlank | 8/24/09 | - | DI | _ | 7B | Js I | VOC, TPH-G | 2-31D6I |
| 2-31-PL2-507C-01-W-3 | | 1050 | DI | | EB | Js I | VOC. Metals, CN, SVOC, SIMPAH,RCBG, TPH-6, TPH-D | |
| 2-31-PL2-507C-61-S-4 | | 1517 | S | P-1 1-2 | _ | Js l | VOCA, Metals, CN, SVOCS SIMPAH, PCBS, 9. Solids | |
| 231-PL2-507(-64-S-0 | | 1127 | S | 4-5 | _ | J ⁵ 1 | | |
| 2-31- PL2-5071-09-5-0 | | 1137 | 2 | 9-10 | (- | Jsl | | |
| Trip Blank | 8125/69 | _ | DI | _ | TB | Js1 | VOCS | |
| 2-31-PL2-507B-01-5-6 | | 0948 | S | Ø-1 1-2 | _ | Jsl | VOC, Metals, CN, SVOCS STMPAH, PCBS, 90 Solids | |
| 2-31-PL2-587B-64-5-6 | | 0954 | S | 4-5 | - | Jsl | | |
| 2-31-PL2-50713-09-5-0 | | 1001 | S | 9-10 | | Jsl | | |
| 2-31- 7900435 | 8126/49 | \$910 | S | _ | <u></u> | JS 11TA | VOCs, Metals, CN, SVOCs, SIMPAH, PCBs, 9. Solids | Waste char. |
| 2-31-2966436 | | 0920 | S | - | - | JS/17N | | |
| 2-31-2908437 | | 0915 | 5 | _ | ~ | JS1/TN | | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|-------------------|-------------|-------|-------|--|------------------------------|----------------------|-------------------------------------|------------|
| TripBlank | 8126109 | _ | DI | _ ` | TB | Js l | Vocs | Waste Char |
| Trip Blank | 8131/09 | | DΙ | _ | TB | JSI | Vocs | 2-31 DGI |
| 2-31-07-33-01-5-0 | | 15a,b | ς | 0-1 | - | JS1/TS | VOCs, metals, % Solids | 1 |
| 2-31-09-33-64-5-0 | | 1530 | S | 4-5 | _ | Js1/75 | | |
| a-31-DP-33-09-S-0 | | 1535 | S | 9-10 | - | 151/75 | | |
| 2-31-DP-04-01-S-p | 8/31/09 | 1626 | S | 09-1 | _ | Js1/75 | VOCs, Metals, Cyanicle, PoSolids | |
| 2-31-DP-04-04-S-0 | | 1630 | S | 4-5 | ms/msd on VOCs | | | |
| 2-31-DP-64-69-5-6 | | 1635 | S | 9-1\$ | | | | |
| 2-31-DP-32-61-S-6 | 8/31/69 | 1243 | S | Ø-I | 1 | | VOCs metals | |
| 2-31-DP-32-64-5-6 | | 745 | S | 4-5 | - | | | |
| 2-31-DP-32-69-S-6 | | 17.48 | S | 9-14 | V | | | |
| 2-31-DP-33-16-W-6 | 8/31/69 | 1716 | GW | 10-14 | | JB | VOCS, dissmetals, diss LLHg | 2-31 DGI |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Sample Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|---------------------|-------------|------|------------|--|------------------------------|----------------------|---|---------------|
| 2-31-DP-33-14-W-1 | 8/3//2009 | | GW | 16-14 | dup field | JB | VOCs diss Metals diss LLHg | P2DG-2-31-DGI |
| 2-31-DP-64-16-W-6 | 813112009 | 1826 | GW | 10-14 | _ | JB | VOCs diss motals, diss LLHq. Total+(11) | 1 |
| 2-31-DP-32-10-W-4 | | 1920 | GW | 10-14 | 1 | JB | VOCs, diss metals, diss LLHg | · |
| 2-31-DP-31-14-W-d | | 2020 | GW | 10-14 | 1 | JB | Vocs, diss metals, diss lity, pcps | |
| 2-31-DP-04-46-W-0 | | 2245 | 6W | 40-44 | _ | JB | VOCs, diss Metals, diss LLHg, Total +WADCA | |
| TripBlank | 1 | _ | DI | _ | TB | JB | VoCs | |
| 2-31-01-31-41-5-4 | | 1858 | S | 0-1 | | 15/15 | VOCs, metals PCBS % Solids | |
| 2-31-DP-31-\$4-5-\$ | | 1903 | . S | 4-5 | _ | | | |
| 2-31-08-31-69-5-6 | 1 | 1906 | S | 9-10 | - | | 4 | |
| 2-31-DP-31-61-5-4 | 1 | 1900 | 5 | 0-1 | co locate | | Vocs, % Solids | |
| TripBlank | 911/09 | | DI | _ | TB | _ | VoCs | |
| 2-31-07-43-61-5-0 | İ | 1507 | S | 6-1 | | TS/JSI | UDCS, metals, CN. 9050lidS | + |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|------|-------|--|------------------------------|----------------------|---|----------|
| 2-31-DP-63-64-5-6 | 9/1/09 | 1514 | S | 4-5 | | Js//TS | VOCS METALS CN 70 Solids | 2-31 D6I |
| 2-31-DP-03-64-5-4 | | 1512 | 1 | 4-5 | Co located | 1 | VOCS 90 Solids | |
| 2-31-DP-W3-69-5-d | | 15/5 | | 9-10 | ~ | | NOCS Metals CN 90 Solids | |
| 2-31-DP-28-01-5-0 | | 1547 | | 0-1 | _ | | VOLS Metals CN PCBs 7050lids | |
| 2-31-DP-28-04-5-\$ | | 1551 | | 4-5 | Ms/MSD for Metals | | | |
| 2-31-09-28-49-5-4 | | 1555 | | 9-10 | - | | | |
| 2:31-DP-03-10-W-4 | | 1615 | 6W | 10-14 | _ | JB | VOCS, DISS Metals, DISS LLHG, Total+WADO | Y |
| Trip Blank | | _ | DI | _ | - | | VOLS | |
| 2-31-01-28-10-W-D | | 1730 | GW | 10-14 | | | VO(s, DISSMetals+CLH) total+WADCU, PCBs | |
| 2-31-DP-03-40-W-d | | 1960 | 1 | 40-44 | - | | VOLS, DISS Metals, HILLY Tot+WAD CN | |
| 2-31-DP-06-10-W-Ø | | 2100 | 6W | 10-14 | _ | JB | VOLS, DISS Metals & LLHG TOT +WAD CN | |
| 2-31-DP-34-10-W-P | 9/11/09 | 2230 | GW | 10-14 | - | 113 | VOCS DISSIMETALS + CCI. | |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| | Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|-----|--------------------|-------------|------|-------|--|------------------------------|----------------------|-------------------------------------|----------|
| | 2-31-DP-06-01-5-0 | 9/1/2009 | 1956 | S | 0-1 | _ | jsl/TS | VOCs, metals, (N), Posolids | 2-31-D6I |
| | 2-31-11-46-64-5-6 | | 1959 | | 4-5 | ms/msD . metals | | | |
| | 2-31-DP-06-09-5-0 | | 2004 | | 9-10 | msimsD VOCs | | | |
| | 2-31-0P-36-01-5-B | | 2032 | | 0-1 | _ | | Vocs, Metals 90 Solids PCBS | |
| | 2-31- PP-36-64-5-4 | | 2034 | · | 4-5 | | | Vocs metals 20 Solids PCBS | |
| 2 | 231-38-38-07-5-X | | | | 45 | cotoxule | | HOCS 9, Solids | |
| | 2-31-PP-36 69-5-0 | \ | 2041 | | 9-10 | ndmso PCBs | | 90 Solids PCBS | |
| | 2-31-01-66-40-6 | | 2400 | GW | 40-44 | ***** | JB | VOCS, PISS METALS +1 | U15 |
| | TnpBlemk | 9/2/09 | _ | DI | _ | TB | 181/165 | VoCs | |
| | 2.31-DP-65-61-S-6 | | 1453 | 5 | 0-1 | _ | | VOCs, Metals, CN, PCBs 20 Solids | |
| . ! | 2-31-DP-05-04-S-9 | | 1457 | S | 4-5 | _ | | | |
| | 2-31-09-65-09-5-0 | 9/2/09 | 15¢¢ | 5 | 9-10 | | 15/ 7LS | | |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|---------------|-------|--|------------------------------|----------------------|--|----------|
| 2-31-DP-05-09-5-4 | 9/2/19 | 1502 | S | 9-10 | Colocale | 151/7 8 S | UDCs, 20Solids | 2-31 DGI |
| 2-31-DP-34-41-5-4 | | 1528 | | 0-/ | _ | 1 | VOCS Metals 25 did | } |
| 2-31-08-34-64-5-8 | | 1530 | | 4-5 | ~ | | - 1 | |
| 2-31-DP-34-64-S-4 | | 1532 | | 4-5 | Colocate | | VOCs, %Solids | |
| 2-31-DP-34-89-S-B | | 1535 | 5 | 9-10 | _ | 15/1765 | VOCS, Metals, 90 Solids. | |
| TripBlank | | _ | DI | _ | TB | JB | WG | |
| 231-0P-05-10-W-0 | | 1600 | GW | 10-14 | · · | | VOCS, DISS MOTHUA TOTHWADON PCBS | |
| 2-31-DP-05-46-W-\$ | | 1845 | | 40-44 | _ | | 1 | |
| 2-31-DP-34-10-W-\$ | | 1700 | | 10-14 | - | | VOCs, Diss Met + CLI | 5 |
| 2-31-DP-11-10-W-Ø | | 2015 | | 10-14 | _ | | . | |
| 2-31-DP-11-41-W-D | | 210 ¢ 2230 | | 40-44 | _ | | | , |
| 2-31-DP-45-10-W-P | 9/2109 | 2100 | 6W | 10-14 | | JB | Vols SVOLS SIMPAHS DISS Metals + LLHS | 2-31 DGI |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|---------------------|-------------|------|---------|--|------------------------------|----------------------|---|----------|
| 2-31-DP-11-Ø1-5-Ø | 9/2/09 | 184¢ | S | 6-1 | - | 1sl/Tcs | VOCs Metals 90 Solids | 231DGI |
| 2-31-DP-11-64-5-p | | 1843 | | 4-5 | _ | | | |
| 2-31-07-11-04-5-4 | | 1844 | | 4-5 | cotocate | | VOCS 20 Solids | |
| 2-31-00-11-49-5-6 | | 1849 | | 9-16 | _ | | 10 Cs Metals 90 Solids | |
| 2-31-DP-40-01-5-0 | | 1915 | | 0-1 | MS/MSD on VOCs | | VOCS Metals SVOCS SIMPAHS 90 Solids | |
| 2-31-07-46-64-5-0 | | 1919 | \$ 15th | 4-5 | | | | |
| 2-31-00-40-69-5-6 | 9/2/49 | 1926 | S | 9-14 | S. Carrier | 15/TLS | | |
| Trip Blank | 9/3/09 | } | DI | 1 | TB | 15/1/TLS | VOCS | 2-31 DGI |
| 2-31-01-07-01-5-0 | | 1513 | S | 0-1 | ms imsu onMetals | | VOCs %Solids Metals + CN | . |
| 2-31-01-07-04-8-4 | | 1516 | | 4-5 | _ | | | |
| 2-31-08-67-69-5-6 | | 1520 | | 9-10 | | | 1 | |
| 2-31-DP-38-\$1-8-\$ | 9/3/09 | 1539 | 2 | 0-1, | _ | 181/765 | VOCs 90Solids Metals SVOCS (SIMPAHS, | 2-31 DGI |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Da | ate Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | : | Comment |
|-------------------|-----------|----------|-------|--|------------------------------|----------------------|---|-----|---------|
| 2-31-DP-38-44-8-4 | 9/3/09 | 1543 | S | 4-5 | _ | situs | VUCs 925olids, Notal. SVOCs SIMPAH PCBS | 2-3 | 1-D6Z |
| 2-31-07-38-49-5-4 | | 1547 | 3 | 9-10 | _ |)SI/TLS | 1 | | |
| Trip Blank | | | DI | _ | TB | JB | VOLs | | |
| 2-31-DP-47-16-W-¢ | | 1615 | -6W | 10-14 | _ | | VOCS Metals+LIHG TOTHWADON | | |
| 2-31-DP-38-12-W-9 | | F30 | , | 12-16 | _ | | VOCs dissynetals+ULH SVOCs, SIMPAHS PCBS | | |
| 2-31-DP-07-40-W-0 | | 1845 | | 40-44 | | JB | VOCs, dissimetals+UHg Tott WADCN | | |
| 2-31-DP-48-10-W-P | | 203 | | 10-14 | - | | Vocs, diss metals + WH Tot + WACN | 9 | |
| 2-31-DP-24-12-W-6 | | 2140 | 6W | 12-16 | _ | JB | 1 | | |
| 2-31-09-48-01-5-6 | | 1932 | S | Ø-1 | _ | 1×1/TLS | vocs, metals, CN + 90 Solids | | |
| 2-31-DP-48-04-S-4 | | 1934 | - | 4-5 | _ | | | | |
| 2-31-DP-48-69-5-6 | | 194 | | 9-10 | - | | | | |
| 2-31-DP-24-61-S-6 | 9/3/69 | 203 | S | Ø-1 | ms/msd onvocs | js1/TLS | 1 | 2.3 | D6I |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|------|-------|--|-------------------------------|----------------------|-------------------------------------|----------|
| 2-31-DP-24-64-S-6 | 9/3/09 | 203/ | S | 4-5 | J | js1/TLS | Vocs metals CN 90 solids | a-31 DGI |
| 2-31-08-24-09-5-0 | 9/3/07 | 2035 | 5 | 9-10 | _ | | L | |
| TrupBlank | 918109 | _ | FOI | 01 - | TB | 151/TLS | VOCS TPH-G | |
| 2-31-DP-47-01-5-0 | | 1437 | 2 | 10-1 | - | | VUCS Metals PCBs 90 Solids | |
| 2-31-DP-47-01-J-4 | | 1442 | | Ø-1 | Colocate | | Vocs 9.50lids | |
| 2-31-01-47-64-5-0 | | 1444 | | 4-5 | ~ | | VOCG METALS PCBS | |
| 2-31-DP-47-09. S-0 | | 1447 | | 9-10 | | | | |
| 2-31-DP-49-01-5-8 | | 1518 | | 0-1 | msims d on CN | | VOCs Metals CN Dx, Gx, To Solids | |
| 2-31-01-49-64-5-4 | | 1520 | | 4-5 | - | | | |
| 2-31-DP-49-69-5-6 | | 1532 | | 9-10 | - | | | |
| 2-31-DP- 29-01-5-0 | | 1623 | | 0-1 | MS/MSD on TPH-DX TPH-GX | | Vocs , metals, CN, Dx, GX | |
| 2-31-DP-29-04-5-0 | 918109 | 1628 | Ś | 4-5 | on VOCs | Js/TLS | | 2-31-DGI |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|---------------------|-------------|------|-------|--|------------------------------|----------------------|--------------------------------------|----------|
| 2-31-08-29-69-5-0 | 9/8/09 | 1640 | 5 | 9-10 | _ | ISTITUS | VOCS Metals CN Dx, Gx, 90 Solids. | 2-31-DGI |
| 2-31-0P-37-\$1-5-\$ | | 1748 | r | 0-1 | _ | 1s1 Trs | VOCS Metals PCBS 90 Solids | |
| 2-31-0P-37-04-5-0 | | 175/ | | 4-5 | MSIMSD on VOCS | | _ | |
| 2-31-01-37-09-5-0 | | 1758 | | 9-10 | • | | 1 | |
| 2-31-DP-35-01-5-6 | | 1822 | | 0-1 | - | | VOCS Metals 40Solids | |
| 2-31-DP-35-64-S-6 | | 1824 | | 4-5 | , | | | |
| 2-31 - 09-35-09-5-0 | | 1829 | 15 | 9-10 | - | bl/TUS. | | |
| Trip Blank | 9/8/07 | | 3DI | _ | ТВ | JB | VOCS TPH-GLD | 2-31-067 |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|---------------------|-------------|------|------------|--|------------------------------|----------------------|---|----------|
| 2-31-DP-49-10-W-0 | 9/8/09 | 1550 | GW | 10-14 | _ | JB | VOCS diss Metals + Wife PCBS | 2-31 DGI |
| 2-31-DP-49-10-W-B | | 1640 | 6 W | 10-14 | - | | VUCs dissMetals+LLHG Tot+WADON, TPH-DC, GX | |
| 2-31-PP-29-10-W-0 | | 1730 | GW | 10-14 | - | | 1 | |
| 2-31-0P-37-18-W-B | | 1900 | GW | 10-14 | _ | | VOCS dissMetals+LLtg PCBS | |
| 2-31-DP - 35- #-W-d | | 2000 | GW | 12-16 | _ | | VOCs diss Metals + LUIty | |
| 2-31-00-41-10 - W-0 | | 2164 | GW | 10-14 | _ | JB | VOCS dissMetals+Ulfg SVOCS + SIMPAITS | |
| 2-31-DP-4/- 61-5-6 | | 1949 | S | 0-1 | _ | JS/TLS | Vocs metals Posolds SVOCs+SIMPAlts | |
| 2-31-DP-41-04-5-0 | 9/8/09 | 1951 | S | 4-5 | _ | jsl/TLS | 1 | 2-31 DGT |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval

^{3 -} EB, TB, Dup, Co-locate, MS/MSD

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Samp | le Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samp Initia | | Analyses | | Comment |
|-------------------|-------|---------|------|------------|--|------------------------------|----------------|----|---------------------------------------|------|---------|
| 2-31-0P-41-09-5-6 | 91810 | >9 | 1955 | S | 9-10 | 7 | fs//7 | 25 | VOCs metals Stocs, SIMAHS Posolids | 2-31 | DGI |
| 2-31-07-43-01-5-0 | | | 2035 | S | 0-1 | | | | VOCs metals 9050lids | | |
| 2-31-00-43-64-5-0 | | | 2037 | 9 | 4-5 | | | | | | |
| 2-31-DP-43-89-S-Ø | | | 2048 | 5 | 9-10 | - | J51/1 | is | j | | |
| 2-31-DP-43-10-W-9 | 9/8/ | 09 | 2200 | \$6W | 19-14 | _ | JB | | VO(s dissMetals dissLitts | 2-31 | DGZ |
| Trip Blank | 9/9 | 109 | _ | ρĮ | _ | TB | ys1/7 | us | VOCs | | |
| 2-31-08-56-61-5-6 | | | 1355 | 2 | 0-1 | _ | | | VOCs 70501US metals PCBS | | |
| 2-31-DP-50-64-S-0 | 9(91 | 09 | 1357 | S | 4-5 | - | Js 1/1 | US | | 2-31 | D6I |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Sample Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|----------------------|-------------|-------|------------|--|------------------------------|----------------------|--------------------------------------|----------|
| 2-31-09-50-89-5-0 | 919109 | 1406 | S | 9-10 | , | JS1/TL5 | VOCs 90 Solids Metals PCBs | 2-31 DGI |
| 2-31-08-25-61-5-6 | | 1720 | | 0-1 | _ | | vocs 9. solids metals + cN | |
| 2-31-DP-25. 64-5-8 | | 1728 | | 4-5 0=1 | - | | | |
| 2-31-00-25-69-5-6 | | 1742 | | 9-10 | | | | |
| 2-31-01-26-01-5-4 | | 1552 | | 0-1 | | | vocs 90 Solids Metals | |
| 2-31-00-26-61-5-4 | | 1554 | | 0-1 | colocate | | vocs 90 solids | |
| 2-31-DP- 26-64-5-\$ | | 1600 | | 4-5 | msimeso — | | vocs 20 Solids Metals | |
| 2-31-DP-26-49-5-4 | | 1615 | S | 9-10 | on VOCs | Js/TLS | | |
| 2-31-DP-5\$-1\$-W-\$ | | 143\$ | SW | 10-14 | _ | JB | VOCS diss Metals | |
| TripBlank | | - | 0I | - | TB | | Vocs | |
| 2-31-0P-25-10 -W-0 | | 1845 | GW | 10-14 | - | | VOCS diss Metals + LUHG TottWADCN | |
| 2-31-DP-26-10 W-0 | 9/9/09 | 1715 | 6W | 10-14 | : | JB | VOCS diss metals + U brag | 2-31DGJ |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

2-31 Data Gaps Investigation Boeing Plant 2

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|-------------------|-------------|------|-------|--|------------------------------|----------------------|-------------------------------|----------|
| 2-31-09-45-01-5-0 | 9/9/09 | 1908 | - 5 | 0-/ | _ | ps//7L5 | VOCs 9. Solids Metals PCBs | 2-31 DGI |
| 2-31-09-45-64-5-6 | | 1910 | | 4-5 | _ | | | |
| 2-31-DP-45-09-5-0 | | 1922 | | 9-10 | - | | | |
| 2-31-00-46-01-5-4 | | 1956 | | 0-1 | ms/msp enmetals | | DES | |
| 2-31-00-46-04-5-8 | | 1958 | | 4-5 | - | | | |
| 2-31-08-46-09-5-0 | | 2007 | S | 9-10 | _ | JS1/TUS | | |
| 2-31-DP-45-16-W-D | | 1945 | GW | 10-14 | 1 | JB | VOCs diss metals + LL | Hg |
| 2-31-DP-46-16-W-9 | 9/9/09 | 2030 | GW | 10-14 | ~ | JB | <u></u> | 2-31 DGI |
| Trip Blank | 9/10/09 | - | DI | | TB | JS1/TLS | VOCs, TPH-GX | 2-31 DGI |
| 2-31-DP-22-Ø1-8-Ø | | 1232 | S | 0-1 | ms imsp on Metals | JS1/TG | VOCS 7. Solids metals | |
| 2-31-08-22-64-8-6 | | 1234 | S | 4-5 | _ | | | |
| 2-31-DP-22-69-5-6 | 9/10/09 | 1240 | S | 9-10 | - | js1/TLS | 1 | 2-31 DGI |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| | | - | | | | Depth | | | <u> </u> | |
|----------|-----------------------|---------------|--------|-------|--------|-----------------------|---------------------|----------|---|-----------------|
| | Committee ID | 0 | . 5 : | | Media | Interval | QA/QC | Samplers | | |
| ŀ | Sample ID | Sample | e Date | Time | ' - | (ft bgs) ² | Sample ³ | Initials | Analyses | Comment |
| ļ | 2-31-00-16-01-5-6 | 9/10/ | 09 | 1456 | S | 0-1 | | 151/TLS | VOCS YOSOlids metals | 2-31 DbI |
| | 2-31-08-16-64-5-0 | | (| 1458 | · | 4-5 | - | | | |
| | 2-31-DP-16-09-5-¢ | | | 1572 | | 9-10 | 1 | | | |
| | 2-31-09-17-01-5-6 | · | | 14.12 | | 0-1 | • | | VOCs 9. Solids metals co PCBs SVOCc Sina PA+K | |
| | 2-31-01-17-64-5-8 | | | 1424 | | 4-5 | | | | |
| | 2-31-01-17-09-5-0 | | | 1432 | S | 9-10 | _ | | | |
| | 2-31-0P-18-01-W-3 | | | 154¢ | DI | - | ΕB | | VOCS Metals CN; PCBS SVOCS SIMPATTS TPHOX TPHOX | |
| | Trip Blanh | | | _ | DI | - | TB | | VOCS TPHGix | 1 |
| | TripBlank | 7 | | _ | D.T. | | TB | | VOCS TPH Gix | 2-31 Waste Char |
| X | 2/31)-2904919-Liquids | | | | Slurry | 1- | 7 | | VOCS RCRA Metals, pH, | |
| | 2-3-17900 59- Solids | | | | | | | | +7050lids | |
| | 2-31- Z900518-Liquids | 9/10/ | '09 | 1815 | | ~ | _ | JS//TLS | VOCS RCRA Metals PH TO+ CN PCBS | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| | | | | | | T | · · | | | |
|----|--------------------|-------------|------|------------|--|------------------------------|----------------------|--|-----------------|--|
| | Sample ID | Sample Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment | |
| 28 | 31-2960518-Sotids | 9/10/09 | | sturry | | | | VOCS RCRA Metals Toten, pH, pels | 2-31 Waste Char | |
| 2 | -31- 296 6441 | | 1815 | | į | ~ | 1.11 | VOCS Metals, SVOCS, SIMPAHS, CN, TPH-G, TPH-Dx, PCBS, 9050lids | 1 | |
| , | Inp Blank | | | DI | _ | TB | JB | VOCS | 2-31 DGI | |
| 2 | -31-DP-22-10-W-p | | 1315 | คพ | 10-14 | _ | JB | VOCs diss Metals +LLHg | | |
| 2 | -31-0P-16-10 -W-6 | | 153¢ | 6W | 10-14 | - | UB | 1 | | |
| 2 | 1-31-DP-17-10-W-0 | | 1445 | 6W | 10-14 | - | JB | VOCS diss Metals + WHg, SVOCS Sim PAHS, Tot +WAS | >CN | |
| 2 | 1-31-DP-18-16 -W-0 | | 1630 | 6W | 10-14 | , | JB | VOCS diss metals +LLHES | | |
| | 1-31-01-18-01-5-0 | | 1556 | 5 | 0-1 | MS/MSD ON VOCS | J5/1765 | VOCs+metals %. Solids | · | |
| 6 | 1-31-DP-18-64-5-\$ | | 7610 | S | 4-5 | _ | | | | |
| 9 | 1-31-DP-18-09-5-8 | | 1626 | S | 9-10 | - | | 1 | | |
| ô | 1-31-DP-18-64-5-4 | 9/10/09 | 1614 | 8. | 4-5 | Co locate | 1 ⁵¹ /765 | VOCS + 90 Solids | 2-31061 | |
| | TripBlank | 9/11/09 | | DI | - | 7B | 15//725 | VOCs | 2-31-DGI | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|-------|-------|--|------------------------------|----------------------|------------------------------------|----------|
| 2-31-DP-12- Ø1-S-Ø | 9/11/09 | 6754 | S | 0-1 | 1 | JSI/TLS | VOCs % Solids Metals CN | 2-31 DGI |
| 2-31-DP-12-64-5-¢ | | Ø8ØØ | · | 4-5 | msimsd on CN | | | |
| 2-31- DP-12-89-S-Ø | | Ø8/5 | | 9-10 | - | | 1 | |
| 2-31-DP-10-01-5-6 | | 0912 | | 0-1 | MS/MSD Metals | | VOCS % Solids Metass | |
| 2-31-DP-10-04-5-0 | | 0914 | | 4-5 | - | | 1 | |
| 2-31-DP-10-09-5-d | | Ø928 | S | 9-10 | _ | JS//715 | 1 | |
| Trup Blank | | _ | DI | | 78 | JB | VOCS dissimulation | 6 |
| 2-31-DP-12-14-W-P | | \$830 | 6W | 10-14 | _ | ĺ | VOLS & dissMtals+ULI total + WADON | 5 |
| 2-31-DP-12-40-W-8 | | 1110 | | 40-44 | , | | Was diss Matals+UH +otal +WADON | 4 |
| 2-31-DP-10-10-W-D | | 0940 | | 10-14 | | | VOCs des Metalot LLE | 49 |
| 2-31-DP-10-40W-B | 9/11/09 | 1300 | GW | 40-44 | ~ | JB | + | 2-31 DGI |
| Trip Blemk | 9/14/09 | _ | DI | | TB | js//7cs | NOG | 2-31 DGI |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|-------------------------|-----------|--|------------------------------|----------------------|------------------------------|----------|
| 2-31-DP-08-01-S-4 | 9/14/2009 | 0746 | S | 0-1 | | Js1/TLS | VOCs metals PCBs Posolids | 2-31767 |
| 2-31-00-08-04-5-0 | | 0749 0749 | | 4-5 | | | 1 | |
| 2-31-01-08-09-5-0 | | 0800 | | 9-10 | ~, | | 1 | |
| 2-31-01-09-01-5-0 | | 6827 0800 | | 0-1 | _ | | VOCs Netals | |
| 2-31-01-09-04-5-0 | | 0829 | | 4-5 | _ | | | |
| 2-31-09-09-5-0 | | 0834 | S | 9-10 | - | | | |
| 2-31-DP- Ø8-01-S-4 | | 0748 | 3 | 0-1 | colocate | | WCs 70 Solids | |
| 2-31-DP-09-09-5-4 | | 0.836 | S | 9-10 | colocake | Js//TLS | _ | |
| TripBlank | | | DI | _ | TB | JB | VOCS | |
| 8-31-DP-08-10 -W-P | | p83¢ | GW | 10-14 | <u> </u> | | VOCs DISSALETALS + | |
| 2-31-DP-08-40 -W-P | | 12pø | | 40-44 | _ | | | |
| 2-31-DP-09-12-WP | 9/14/09 | 1130 | GW | 12-14 | _ | JB | voce dissimals | 2-31 DGI |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| | | | | | l | | | |
|-------------------|-------------|------|------------|--|------------------------------|----------------------|------------------------------|------------|
| Sample ID | Sample Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
| 2-31-DP-69-40-W-0 | 9/14/09 | 1400 | GW | 40-44 | _ | JB | VOCS diss metals +CLA | 231 DGI |
| 2-31-0P-42-16-W-6 | | 0920 | aw | 10-14 | _ | JB | | |
| 2-31-0P-42-16-W-1 | | 0930 | GW | 10-14 | field Dup | JB | 1 | |
| 2-31-01-42-61-5-0 | | 0901 | 5 | 0-1 | , | stris | WCs Metals 9050lids | |
| 2.31-DP-42.04-S-P | | 0903 | 2 | 4-5 | <u>-</u> | | | |
| 2-31-01-42-69,5-6 | 9/14/09 | 0906 | S | 9-10 | ms imsp on Metals | | 1 | |
| Trip Blank | 9115/09 | _ | DI | | TB | JS//TLS | VOCs | 2.31 DGI |
| 2-31/01-44-01-5-0 | | 0520 | S | 0-1 | 1 | | vocs metals sosolids pcas | HOLD CANCE |
| 2-31-DP-44-04-S-d | | 0522 | 2 | 4-5 | - | | | HOLD CANCE |
| 2-31-DR 30 01-8-0 | | | | | | | | |
| 2-31-DP-24-09-5-D | | OF 1 | S | 9-10 | msimsb on PCBs | | Vols 70 blidg Mtals PCBs | |
| 2-31-DP-30-09-S-0 | 9/15/09 | 0638 | S | 9-10 | _ | J3/TUS | 1 | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media 1 | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|----------------|------------|--|------------------------------|----------------------|-----------------------------|---------|
| 2-31-07-27-01-8-0 | 9/15/09 | 0922 | S | 0-1 | • | JS/TLG | vocs metals tcn Posolids | 2-310GI |
| 2-31-08-27-04-5-6 | | 0929 | S | 4-5 | ~ | | | |
| 2-31-01-27-09-S-\$ | | 0937 | S | 9-10 | ~ | 151/TLS | Ţ | |
| TripBlank | | _ | DI | 1 | TB | 18 | VOCS | : |
| 2-31-DP-30-10-W-0 | | 0800 | 6W | 10-14 | - | JB | VOCs diss Metals + LLH | |
| 2-31-0P-15-10-W-0 | | 0840 | GW | lo-14 | , | JB | | |
| 2-31-DP-27-16 -W-0 | | 1 6 6 & | GW | 10-14 | ~ | JB | VOCS diss Metalst LUH | |
| 2-31-DP-21-18 -W-B | | 1145 | GW | 10-14 | _ | JB | VOCS dies Metals HUH | 8 |
| 2-31-DP-23-19 -W-D | | 1230 | Gu | 10-14 | _ | JB | | |
| 2-31-DP-21-Ø1-S-Ø | \ | 1100 | S | 0-1 | _ | istrus | voce metals | |
| 2-31-DP-21-04-S-0 | | 1104 | S | 4-5 | - | | | |
| 2-31-08-21-09-5-0 | 9,15/09 | 1110 | S | 9-10 | - | | | |

^{1 -} Soil, GW, DI 2 - Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|---------------------|-------------|------|-------|--|------------------------------|----------------------|--|----------|
| 2-31-DP-23-01-5-6 | 9115/09 | 1133 | S | 0-1 | 1 | osttis | vocs Metals | 2-31 DGI |
| 2-31-00-23-64-5-6 | | 1137 | | 4-5 | <u> </u> | | | |
| 2-31-DP-23-09-S-0 | | 1142 | | 9-10 | - | | | |
| 2-31-DP-23-09-S-4 | 9/15/09 | 1145 | 5 | 9-10 | co locate | + | vocs 90 Solids | |
| Trip Blank | 9116109 | - | DI | - | ТВ | JS/ITLS | VOCS, TPH-G | 2-31D4I |
| 2-31-01-01-5-6 | | 0728 | 2 | 0-1 | _ | | VOCS TPHG 7050li | ds |
| 2-31-DP-01-5-4 | | 0730 | S | 0-1 | co locate | | Vocs 7. Solids | |
| 2-31-0P-0F-64-S-0 | | 0737 | S | 4-5 | | | MCs TPHG % Solids Motals TPHD | |
| 2-31-DP-\$1-\$9-5-6 | | 0745 | S | 9-10 | _ | | | |
| 2-31-DP-39-01-S-Ø | | 0912 | 5 | 0-1 | - | | VOCS SVOCS SIMPAHS Metals Cypnide TPHG TPHD PCBS 90 Solids | |
| 2-31-DP-39-04-S-0 | | 0924 | S | 4-5 | _ | | | - |
| 2-31-01-39-09-5-0 | 9/16/09 | 0937 | S | 9-10 | - | JILTUS | 1 | |

and the second of the second s

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample [| Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment | |
|--------------------|----------|------|------|-------|--|------------------------------|----------------------|---------------------------------------|-----------|------|
| 2-31-09-39-09-5-4 | 9/16/0 | 9 | 0939 | S | 9-10 | co locate | 15/TLS | Vocs 70 Solids | 2-31 D6 I | |
| 2-31-DP-Ø1-10 -W-0 | | | 0815 | 63 | 10-14 | - | JB | VOCS Bedissuetals +Litty TPHG TPHD | | |
| TropBlank | | | | DI | | TB. | | vocs TPHG | | |
| 2-31-DP-39-10 -W-0 | | | RAAI | Gw | 10-14 | , | | Everything 2-2 | · | |
| 2-31-09-39-40 -W-0 | 9/16/ | 09 | 1246 | Gw | 40-44 | _ | | 1. | | |
| 2-31-DP-39-68-W-d | 9/17/0 | 9 | 1110 | GW | 68-72 | ~ | JB | 1 | | |
| TupBlank | alith | 09 | | DI |) | TB | JB | VOCS 7PH-G | 2-31 DGI | |
| Try Blank | 9/21/0 | 9 | - | DI | | TB | ISTITLS | VOCs | | |
| 2-31-01-44-01-5-4 | 9/2/0 | 9 | 0528 | S | 0-1 | _ | | VOCs 90 Solids | | |
| 231-DP-44-04-5-0 | | | 0530 | S | 4-5 | | | | | ···· |
| 2-31-DP-44-09-5-0 | | | 0535 | S | 9-10 |) | 1 | 1 | | |
| 2-31-09-44-10-W-0 | | | 0613 | GW | 10-14 | _ | KA | VOCs dissuelals tub | 5 + | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sampl | o Dato | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | | | Comm | oont . |
|-------------------|--------|--------|-------|-------|--|------------------------------|----------------------|---|------------------|--------|---------|--------|
| 2-31-DP-19-01-S-0 | 9/21/0 | _ | 0748 | S | 0-1 | Sample | Isl/Tus | 142 C S 9. C. A | ds | 2-31 D | | HOLD |
| 2.31-08-19-04-5-0 | , | | Ø 75Ø | S | 4-5 | 1 | İ | | · | 1 | - | HOLD |
| 23429-19-69-5-4 | | | | | 9-10 | msinsin on Metals | | | | | <u></u> | |
| 2-31-08-20-01-5-0 | | | 0708 | S | 0-1 | _ | | | | 2-31 | DGI | |
| 2-31-DP-20-01-5-4 | | | 0711 | | 0 -1 | co locate | | VOCS 90 SO | | | | |
| 2-31-08-20-04-5-0 | | | 6709 | | 4-5 | - | | WG 70 Sol Metals | | | | |
| 2-31-08-28-095-0 | | | 0725 | | 9-10 | | | • | 1 | | | , |
| 2-31-DP-13-01-8-0 | | | 1334 | | 0-1 | 1 | | VOCS Po Solid CYANIAR SWG SIMPAHS | ds meter | els | | |
| 2-31-07-13-01-5-4 | | | 1336 | | 6-1 | co locate | | WCs % Soli | | | | |
| 2-31-09-13-04-5-6 | | | 1337 | | 4-5 | 1 | | VOG 90 Solids SVO(S SVM MHS | Meterls 1°CBs | | | |
| 2-31-08-13-09-50 | | | 1342 | | 9-10 | | | | | | | |
| 2-31-DP-14-01-5-0 | | | 1412 | | 0-1 | | 1 | 1 | - | 7 | , | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample I | Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Sampler Initials | s Analyses | Comment |
|--------------------|----------|------|-------------------|-------|--|------------------------------|---------------------|--|--------------------|
| 2-31-01-14-64-5-6 | 9/21/0 | 7 | 1414 | S | 4-5 | 1 | <i>jsiTLs</i> | WCs 90 Solids Metals Cyanide SWCs SIMPAHS PCBS | 2-31 DGI |
| 2-31-01-14-69-5-6 | | | 1422 | 2 | 9-10 | . | | | |
| TrupBlank | | | _ | DI | | TB | KA | VOCs | |
| 2-31-DP-24-10 -W-B | | | 0749 | GW | 10-14 | 1 | | VOCS diss Nevals + LLHg | |
| 2-31-DP-13-10 -W-0 | | | 1458 | Gw | 10-14 | • | | VOCS diss Metals+ LLHG TO++WADEN SVOCS+SIMPAH PCBS | |
| 2-31-DP-14-12 -Wp | 9/21/09 | 1 | 1430 | GW | 12-16 | - | | | |
| 2-31-2-900446 | 9/22/0 | >9 | lØ3ø | S | ~ | • | jsl | VOCs Motals, Cyanida SVOCS + SIMPAHS PCA TPH-DX, TPH-GX, 96501 | ds 2-31 Waste Char |
| Trip Blank | 9122/0 | 9 | | DI | _ | 7B | Jsl | VOC; TPH-KX | 1 |
| Trip Blank | 912410 | 9 | | DI | _ | TB | js// _{TL} | VOCS, TPH-GX | 2-31D6I |
| 2-31-DP-19-01-5-0 | | | 0752 | S | 0-1 | _ | | VOCs Metals Posolids | |
| 2-31-DP-19-04-5-0 | | | 0754 | S | 4-5 | _ | | | |
| 2-31-DP-19-69-5-6 | 9/24/0 | ۱٦ | φ 7 59 | S | 9-10 | ms/msp onmetals | JSI/TLS | 1 | 1 |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | , Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|-------------------------|-------------|-----------|-------|--|-------------------------------|----------------------|--|--------------------------|
| Trip Blank | 9/24/09 | - | DI | · | 7B | JB | VOCS TPH-G | 2-31-DGI |
| 2-31-DP-19-10-W-0 | | 0845 | GW | 10-14 | 1 | JB | VOCS dissiletals | 1 |
| 2-31-DP-02-101-W-0 | | 1040 | GW | 10-14 | , | JB | VOCS SVOCS+ SAMPAHS DISS METALS + LLITY TOL+WADEN, TOLHA | |
| 2-31-DP-02-40 -W-0 | | 1400 | GW | 40-44 | - | JB | 1 | |
| 2-31-DP-62-61-5-6 | | 1005 | S | 0-1 | _ | JS//TLS | VOLS SVOCS+SUMPAHS METALBICN, TPH-G TPH-D, PCBS | |
| 2-31-01-62-64-5-6 | | 1007 | S | 4-5 | MS/MSD on SVOCS +SIMPAH | j | | only enough vol. For MS. |
| 2-31-08-62-69-5-0 | 9124/09 | 1018 | S | 9-10 | usimsd on CN | 1 | L | |
| 2-31-00-19-10-W-1 | 9/24/09 | 0855 | GW | 10-14 | Field Dup | JB | VOCs Diss Metals + with | + |
| TripBlank | 9128109 | - | DI | _ | Тв | Jsl | VOCS TPH-G | 2-31 Waste Char |
| 2-31-2900447 | | 0755 | S | _ | _ | jsl | VOCS, TPH-G, 9050lids TPH-Do, PCBS, Metalo, CO SVOCS + SIMPAHS |) , |
| 2-31- 7900579 - Liquids | | 0811 | L | _ | _ | Js1 | RCRAMETULS PH VOCS Tot CN, 1 | |
| 2-31-2900519- Solids | 9/28/09 | 7825 | S | _ | - | Jsl | | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analyses | Comment |
|--------------------|-------------|------|-------|--|--|----------------------|--|----------|
| Trip Blank | 1011/09 | _ | DI | _ | | IB/KA | 7PH-G VOCS All-see Table 22 | 2-31 DGI |
| 2-31-PL2-502A-W-Ø | 101118 | 0842 | GW | 8-18 | ms/msp on Allpavamen | er JBIKA | All- see Table 2-2 | |
| 2-31-PL2-503A-W-0 | 10/1/09 | 1254 | GW | 7-17.5 | MJ/MSD on VOC5 + diss Multi-Will | 161KA | See Table 2.2 | |
| Trip Blank | 10/2/09 | _ | DI | j | TB | KA | VOCS | |
| 2-31-PL2-501A-W-& | | 0910 | 6W | 10-20 | _ | | VOCs, Fot + Diss metals +LLHg, Redox, 1 Tot +WADEN | |
| 2-31-P-2-501B-W-6 | | 1032 | GW | 40-50 | ms/msd on vocs chidiss mettruts | | 1 | |
| 2-31-PL2-501C-W.\$ | 10/2/09 | 1245 | GW | 68-78 | insimsd on vocs dissimethich |) KK | Your Tot+Dissmetals tility, Redox | |
| Trip Blank | 10/5/09 | _ | DI | 知- | TB | KAIJB | vocs TPH-G | |
| 2-31-PL2-589A-W-Ø | | 0839 | GW | 8-18 | | | see Table 22 | |
| 2-31-PL2-569B-W-B | | 1043 | aw | 40-50 | _ | | + | |
| 2-31-PL2-509A-W-1 | | 0850 | GW | 8-18 | Field | KA/JB | 1 | |
| 2-31-PLZ-504A-W-Ø | 10/5/09 | 1150 | GW | 4-2-14.7 | | KANB | See Table 22 | 2-3106I |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

| Sample ID | Sample Date | Time | Media | Depth Interval (ft bgs) ² | QA/QC Sample ³ | Samplers Initials | Analys | es | | Comment |
|-------------------|-------------|------|-------|--|------------------------------|----------------------|-------------|------|------|---------|
| 2-31-PL2-505A-W-Ø | 10/5709 | 1330 | GW | 9-24.5 | (| KALIB | See Table | 2.2 | 2-3 | 1061 |
| 2-31-PL2-505A-W-1 | 12/5/09 | 1345 | aw | 9-24.5 | Field Dup | KAUB | L | | | |
| Trip Blank | 1016/09 | + | bΙ | - | 7 | KANB | VOCs TPH | 1-61 | | |
| 2-31-PL2-233A-W-Ø | 10/6/09 | 1035 | GW | 10-25 | _ | | SeeTable | 22 | | |
| 2-31-PL2-233A-W-1 | 10/6/09 | 1100 | aw | 10-25 | Field Dup | | | | | |
| 2-31-PL2-507A-W-d | \$ 10/6/09 | 1457 | 6W | 8-18 | | | | | | |
| 2-31-PL2-507A-W-1 | \$ 10/6/09 | 1500 | 6W | 8-18 | Field Dup | | | | | |
| 2-31-PL2-507B-W-Ø | \$10/6/09 | 1300 | 6W | <i>3</i> 5-45 | _ ' | | | | | |
| 2-31-PL2-507B-W-1 | \$ 10/6/09 | 1315 | 6W | 35-45 | Field | | | | | |
| 2-31-PL2-507C-W-0 | 10/7/09 | 0840 | GW | 77-85 | _' | KANB | See Table 6 | 1,2 | 2-31 | DGI |
| Trip Blank | 10/7/09 | ~ | DI | | TB | KAJIB | 7/0Cs | | | - |
| | t | | | | | | | | | |

^{1 -} Soil, GW, DI

^{2 -} Soil sample depth interval, or borehole screen interval 3 - EB, TB, Dup, Co-locate, MS/MSD

Table 2-2
2-31 Area Proposed CMS Data Gaps Sampling
Boeing Plant 2

| | | | | | nt Groups with | | | Other Cons | stituent Groups | |
|-----------------|----------------------------|--------------------------------|-------------|--|---------------------------------------|-----------------------------|--|------------|---------------------------------------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total and Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | | G | ROUNDWAT | ER SAMPLII | NG SUMMARY | |
| | New Wells | | | | | | | | | |
| 10/6/09 1300 -9 | PL2-507B | 35 - 45 | 75. | 1000 | • dup diss. | VV. | | • ** | | Constituent list to match PL2-507A. |
| 10/7/09 840 | PL2-507C | 75 - 85 | 4. | 202 | VV | V. | | V . V | vvvvv | Constituent list to match PL2-507A. |
| | Existing Wells | | Section 1 | | Super register in the second | | 1 | | | |
| 10/6/09 /035-01 | PL2-233A | 10 - 25 | KK. | ELE | W. V | 7. | 4.4 | | 10000 | PCBs not a GW COC for 2-31 Area. Analyze all 2-31 Area COCs. |
| W2169 09/0- | PL2-501A | 10 - 20 | 7 | | 1.0 | V. | | | VVV | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND near well. Cyanide detected in the A-level near well. |
| 10/2/09 1032 | PL2-501B | 40 - 50 | *:•: | | MS/MSD diss. Only | 119 | | | No. | PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND in A-level near well. Cyanide detected in the A-level near well. |
| 19/2/09 1245 | PL2-501C | 68 - 78 | • acr | | MS/MSD diss. Only | | | | • | PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND in A-level near well. Cyanide will be analyzed at a later time if detected > SL in the B-level. |
| 10/1109 0842 | PL2-502A 72 | 8 - 18 | 120 | 77 77 77 77 77 77 77 77 77 77 77 77 77 | V V V V V V V V V V V V V V V V V V V | • | 00 00 00 00 00 00 00 00 00 00 00 00 00 | 000 | V V V V V V V V V V V V V V V V V V V | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and SVOC analyte lists and PCBs. Cyanide detected near well. TPH never analyzed at or near well. |
| 101109 1254 - | PL2-503A | 7 - 17.5 | 75 1 | SIN SANK | MS/MSD diss. Only | | Y. Z. | | 12. | PCBs not a GW COC for 2-31 Area. SVOCs detected near well. Cyanide ND near well. TPH detected in samples from well. |
| 10/5/09 1150-0 | PL2-504A | 4.2 - 14.7 | ever. | 200 | ~~ | | ev. | | VV • | PCBs not a GW COC for 2-31 Area. SVOCs detected near well. Cyanide ND near well. TPH detected in samples from well. |
| 10/5/09 1345 | PL2-505A | 9 - 24.5 | VVV | YV• | ● dup diss. ✓ only ✓✓ | | VV. | | | PCBs not a GW COC for 2-31 Area. SVOCs detected near well. Cyanide ND near well. TPH detected in samples from well. |
| 10/6/09 1457 | PL2-507A ว [ู] | 8 - 18 | 75 | 1.7 | • dup diss. | ~ · · | | • 6 | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. SVOCs and TPH ND near well. |
| | PL2-508A | 9 - 19 | Not Sampled | | | | | | | Redundant sampling location with PL2-509A. |
| 10/5/09 0839 | (4) | 8 - 18 | 177 | 5. | • dup diss. only | · | V | | W | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and SVOC analyte lists and cyanide. PCBs not a GW COC for 2-31 Area. TPH not analyzed near well. |
| 10/5/09 1043 | PL2-509B | 40 - 50 | VV. | | VVV | • | | | V | PCBs not a GW COC for 2-31 Area. SVOCs and TPH ND in A-level near well. Cyanide detected in the A-level near well. |

38

34/50

Table 2-2
2-31 Area Proposed CMS Data Gaps Sampling
Boeing Plant 2

| | | | | | t Groups with | | | Other Con | stituent Groups | |
|----------------------------------|----------------|--------------------------------|------|------------------|---|-----------------------------|----------------------------|-----------|---------------------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | | G | ROUNDWAT | ER SAMPLI | NG SUMMARY | |
| | Direct Push Lo | ocations | | | | | 1 | | r | |
| 4/16/09 08/5 | 2-31-DP-01 | 10 - 14 | 0 | | · · · | | レ・ノ | | | Evaluate the soil to groundwater pathway for TPH. |
| 9/24/09 1040 | 2-31-DP-02 | 10 - 14 40 - 44 | • | V. V. | | · | v | | | Evaluate GW quality at former PL2-506A location. SVOCs detected near probe location. TPH detected in sample from PL2-506A. |
| 9 /1109 1615 1900 | 2-31-DP-03 | 10 - 14 40 - 44 | V • | | V • _ | • | | | | Near PL2-509A to determine the lateral extent of VOC impacts from AOC 2-31.21. Evaluate the soil to groundwater pathway for selected soil COCs from the metals and VOC analyte lists and cyanide. |
| 8/31/09 1820 | 2-31-DP-04 | 10 - 14 40 - 44 | V | | ~~~ | • | | | | Near PL2-509A to determine the lateral extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| 1/2/09 1600 | 2-31-DP-05 | 10 - 14 40 - 44 | V • | | V · V | | | | | Downgradient of PL2-501A to determine extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. Evaluate the soil to groundwater pathway for PCBs. |
| 9/1/09 2100 | 2-31-DP-06 | 10 - 14 40 - 44 | V . | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | | | | Downgradient of PL2-501A to determine extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. |
| 913/09 16/5 | 2-31-DP-07 | 10 - 14 40 - 44 | V. | | V. V | > | | | | Downgradient of PL2-501A to determine extent of VOC impacts from AOC 2-31.21. Cyanide detected nearby. |
| 1 1845 9114/09 0830 L 1200 | 2-31-DP-08 | 10 - 14 40 - 44 | | | ン・ン | | | | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| 9/14/09 1130 L 1400 | 2-31-DP-09 | 1 0 - 14 40 - 44 | - | | V · V | | | | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| 9/11/09 940 | 2-31-DP-10 | 10 - 14 40 - 44 | | | ~~~ | | | | | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| 9/2/092015 | 2-31-DP-11 | 10 - 14 40 - 44 | | | | | | | , | Downgradient of PL2-502A to determine extent of VOC impacts from AOC 2-31.21. |
| 4/11/09 0830 | 2-31-DP-12 | 10 - 14 40 - 44 | - | | V • V | J. | | | | Evaluate TCE release downgradient of AOC 2-31.21. Probe data from 1995 and 2002 indicate VOCs in this area. Cyanide detected nearby. |
| 7/2/69 1458 | 2-31-DP-13 | 10 - 14 | V • | V.V | V • V | 1 | | 1. | | Evaluate the soil to groundwater pathway for selected soil COCs from the SVOC analyte list and cyanide and PCBs. |

BLUE = DUPLICATE YELLOW = MS/MSD

Table 2-2
2-31 Area Proposed CMS Data Gaps Sampling
Boeing Plant 2

| | Should Second | | | | nt Groups with | | | Other Con | stituent Groups | |
|-------------------|----------------|--------------------------------|------------|------------------|---------------------|-----------------------------|----------------------------|------------|---------------------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | P¢Bs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | | G | ROUNDWAT | TER SAMPLI | ING SUMMARY | |
| | Direct Push Lo | cations | | | | | | | | |
| 9121/09 1430 | 2-31-DP-14 | 10-14 | V. | V. J | 1.0 | V. | | V. | | Evaluate the soil to groundwater pathway for selected soil COCs from the SVOC analyte list and cyanide and PCBs. |
| 1115/09 0840 | 2-31-DP-15 | 10 - 14 | v • | | v •/ | | | 26 | | Evaluate the soil to groundwater pathway for PCBs. |
| 9/10/09 1530 | 2-31-DP-16 | 10 - 14 | · | | v • 0 | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/10/07 1445 | 2-31-DP-17 | 10 - 14 | V | v • v | V • V | V.• | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| 910/09 1636 | 2-31-DP-18 | 10 - 14 | V | | レ・ノ | ar a barana Ar | | 5 | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9124/09 0845 (-0) | 2-31-DP-19 | 10 - 14 | V • V | | VV • JV | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/21/09 0749 | 2-31-DP-20 | 10 - 14 | v· | | v • V | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/15/109 1145 | 2-31-DP-21 | 10 - 14 | v | | V. V | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/10/09 1315 | 2-31-DP-22 | 10 - 14 | V. | | V.V | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 91/5/09 1230 | 2-31-DP-23 | 10 - 14 | V• | | v. v | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 1/3/09 2140 | 2-31-DP-24 | 12-16 | / • | and the | レ・レ | J. | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| 91964 1845 | 2-31-DP-25 | 10 - 14 | • | | · · · | 0 | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| 919109 1715 | 2-31-DP-26 | 10 - 14 | · | | 10 V | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and VOC analyte lists. |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | | | nt Groups with s in Groundw | | | Other Con | stituent Groups | |
|----------------|----------------|--|----------|------------------|--------------------------------|--|----------------------------|------------|---------------------|---|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | | G | ROUNDWAT | ER SAMPL | ING SUMMARY | |
| | Direct Push Lo | ocations | T | | | | | | | |
| 9/15/09 1000 | 2-31-DP-27 | 10 - 14 | 1 | | v • v | /• | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| 9/1/09 1730 | 2-31-DP-28 | 10 - 14 | V . | | V. V | ✓• | | / • | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and VOC analyte lists and cyanide and PCBs. |
| 9/8/09 1730 | 2-31-DP-29 | 10 - 14 | ~ · WA | | レ・レ | V | V。 V | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide and TPH. |
| 9115/09 0800 | 2-31-DP-30 | 10 - 14 | V. | | | | | v. | | Evaluate the soil to groundwater pathway for PCBs. |
| 8/31/49 2026 | 2-31-DP-31 | 10 - 14 | V . | | v. V | | | √ • | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list and PCBs. |
| 8/31/09-0 1826 | 2-31-DP-32 | 10 - 14 | 1. | | V. V | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| 8/31/09-0/7/0 | 2-31-DP-33 | 10 - 14 | 1.1 | | 1.4 | and the state of t | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| 9/2/09 1700 | 2-31-DP-34 | 10 - 14 | -• | | V. V. | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/8/09 2000 | 2-31-DP-35 | 10-14 | | | ン・レ | n e | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/1/09 2230 | 2-31-DP-36 | 10 - 14 | v. Wet | | シ シ | | | V. | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. |
| 918109 1900 | 2-31-DP-37 | 10 - 14 | · • | | V. V | | | V. | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. |
| 9/3/01/1730 | 2-31-DP-38 | 12-16 | V | V. | V.V. | | | al. | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. |
| 9/16/09 1000 | 2-31-DP-39 | 10 - 14 40 - 44 C-level (top of silt) | V. | V V | | V. | v V | 0 | • | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and PCBs. Evaluate the potential for chlorinated VOCs at depth. Match analyses for PL2-502A. |
| | | 68-72 | | | | | | | | |

BLUE = DUPLICATE YELLOW = MS/MSD

w & w w

Work Plan Table 2-2

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling **Boeing Plant 2**

| | | | | | nt Groups with Ss in Groundw | | | Other Con | stituent Groups | |
|----------------|----------------|--|--|--|---------------------------------|-----------------------------|----------------------------|-----------|---------------------|---|
| | Location | Sample Interval (ft ocation bgs) | VOCs | SVOCs (cPAHs) | Dissolved Metals | Total and WAD Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | Redox Parameters | Rationale for Selection of Laboratory Analyses |
| | | | | | | G | ROUNDWAT | ER SAMPLI | ING SUMMARY | |
| chicalia | Direct Push Lo | cations | | | | | | | | |
| 9/2/09 2/00 | 2-31-DP-40 | 10 - 14 | | | V. V | | | | | Constituent list to match groundwater list. Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/8/2009 2100 | 2-31-DP-41 | 10 - 14 | V. | v. v | VOV | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals and SVOC analyte lists. |
| 9/14/09 0920-0 | 2-31-DP-42 | 10 - 14 | V | | 7.4 | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list. |
| 9/8/09 2200 | 2-31-DP-43 | 10 - 14 | • | | v• v | | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the VOC analyte list. |
| 9/21/090613 | 2-31-DP-44 | 10 - 14 | V. | mad ^Y janny | V . v | | | • | | Evaluate the soil to groundwater pathway for PCBs. |
| 9/9/09 1945 | 2-31-DP-45 | 10 - 14 | · • | m d | J .U | | | | | Evaluate the soil to groundwater pathway for PCBs. |
| 9/9/09 2030 | 2-31-DP-46 | 10 - 14 | · . | | | | | 4. | | Evaluate the soil to groundwater pathway for PCBs. |
| 918109 1550 | 2-31-DP-47 | 10 - 14 | V. | | v · v | | | · | | Evaluate the soil to groundwater pathway for PCBs. |
| 9/3/09 2030 | 2-31-DP-48 | 10 - 14 | · | | /./ | V • | | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide. |
| 918/69/640 | 2-31-DP-49 | 10 - 14 | · | | · · · | /• | V. V | | | Evaluate the soil to groundwater pathway for selected soil COCs from the metals analyte list and cyanide and TPH. |
| 119109 1430 | 2-31-DP-50 | 10 - 14 | V. | | v.V | | | /. | | Evaluate the soil to groundwater pathway for PCBs. |
| | Notes: | 0.00 | Annual Committee of the | The state of the s | | 0.00 | | | | |

NA

Not applicable

PCBs

Polychlorinated biphenyls

SVOCs

Semivolatile organic compounds

TPH

Total petroleum hydrocarbon

VOCs

Volatile organic compounds

Note on sample intervals

For existing wells, sample interval is the installed screen interval. For new wells, sample interval is the planned approximate screened interval. For soil samples, sample interval is the planned sampling depth.

BLUE = DUPLICATE YELLOW = MS/MSD

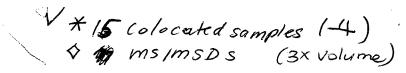


Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| Equip Blank V2-31-PL2-507C-61-W-3 @1050 8/24/09 | | | | Con | stituent Gro | ups with 2-3 s in Soil | 1 Area | | Other | |
|---|---------------|--------------------------------|---------------|---|-----------------|---------------------------|----------------------------|-------------|------------|--|
| @ 1050 8/24/09 | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total Metals | Total Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | тос | Rationale for Selection of Laboratory Analyses |
| 2-31-0P-18-01-W-3 V @ 1540 9/10/09 V 8/25/09 0948 | | MS/MDs | an 8 | 1/1/ | 8 | 3 | ///so | | NG SUMMARY | |
| | New Wells | | +++ | <u> </u> | 44t-11 | ill | 1 | 1/ | <u> </u> | |
| 1 6954 (00) | PL2-507B | 0 to 1 4 to 5 9 to 10 | 111 | ンン・ | 7. | レレ | · | 77. | | Constituent list to match groundwater at PL2-507A. Evaluate extent of selecter soil COCs from the metals analyte list and PCBs. |
| low recovery 8/24/09 1127 | PL2-507C | | \$ P. P. | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | *** | ×. | | 72. | | Constituent list to match groundwater at PL2-507A. Evaluate extent of selecte soil COCs from the metals analyte list and PCBs. |
| (| Direct Push I | Locations | | | · | <u> </u> | | | | |
| 4/16/09 0728 | 2-31-DP-01 | * 0 to 1 4 to 5 9 to 10 | 1. | | ~ M | | V. L. | | | Constituent list to match groundwater at this location. Evaluate extent of TPH in soil. |
| 9/24/09 (005 | 2-31-DP-02 | 0 to 1 4 to 5 9 to 10 | 1. | Vio \$ | 4 | V V W Q | 77. | | | Constituent list to match groundwater at this location. |
| 9/1/09 15/07 9/1/09 15/0, 15/2 15/5 8/31/09 1626 | 2-31-DP-03 | 9 to 10 | ン・ ン・ ン | | | 1. | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. Verify cyanide non-detect associated with elevated RLs. |
| 1635 +msi | 2-31-DP-04 | 9 to 10 | V • \$ | | 25/ | ンレン | | | | Constituent list to match groundwater at this location. |
| 1457 | 2-31-DP-05 | ∠ 9 to 10 | ン・ノ | | 77. | 7. | | | | Constituent list to match groundwater at this location. Verify PCB non-detect associated with elevated RLs. |
| 9/1109 1956 1959 2004 | 2-31-DP-06 | 9 to 10 | V . | V | V | | | | | Constituent list to match groundwater at this location. |
| 9/3/09 15/3 | 2-31-DP-07 | 9 to 10 | V | | 100 | V. | | | | Constituent list to match groundwater at this location. |
| 9/14/09 0746 0748 0749 | 2-31-DP-08 | | V V | | 4. | | , | | | Constituent list to match groundwater at this location. |
| 9/14/09 0827 | 2-31-DP-09 | 1 | ソ・ノ | | 2./. | | | | | Constituent list to match groundwater at this location. |
| 0829 0834 0836 | | 1 | レノ | | | | | | | To make to maken groundwaker at this location. |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | | Cons | stituent Grou COCs | ps with 2-3 in Soil | 1 Area | | Other | |
|--|---------------|--------------------------------|-------------|------------------|-----------------------|------------------------|----------------------------|---------------------|------------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total Metals | Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | тос | Rationale for Selection of Laboratory Analyses |
| | | | | | | | | L SAMPLI | NG SUMMARY | The state of the s |
| | Direct Push L | | | | | | <u> </u> | | | |
| 7 9111/09 09/2 09/4 0928 | 2-31-DP-10 | |) - | | | | | 2' | | Constituent list to match groundwater at this location. |
| 1840 1843,1844 1849 | 2-31-DP-11 | 0 to 1 4 to 5 9 to 10 | ン・レ | | ١ | | | | | Constituent list to match groundwater at this location. |
| 4/11/09 8754 8800 8815 | 2-31-DP-12 | 0 to 1 4 to 5 9 to 10 | 111 | | د د د ا | V V Note | filled , lim | Submillé fedus l | | Constituent list to match groundwater at this location. |
| 9/21/09 1334,1332 1332 1342 | 2-31-DP-13 | → 0 to 1 4 to 5 9 to 10 |))) | 151 | • | 2. | | 717 | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the SVOC analyte list and cyanide and PCBs. |
| 9/21/09 1412 1414 1422 | 2-31-DP-14 | 0 to 1 4 to 5 9 to 10 | 111 |))) | 11.1 | ر در | | 12 | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the SVOC analyte list and cyanide and PCBs. |
| V 9/15/09 0701 | 2-31-DP-15 | 9 to10 In Tunnel K | ٥ | | /• | | | V•VL | | Verify PCB non-detect associated with elevated RLs. Placement of location is respective of building limitations and proximity of functioning professional office space. Groundwater will be sampled to support the pathway evaluation for silver. |
| 9/10/09/456 1458 15/2 | 2-31-DP-16 | 0 to 1 4 to 5 9 to 10 | ン・ | i. | 7 | | | ي الحد | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. |
| 4110109 1412 1424 1432 | 2-31-DP-17 | 0 to 1 4 to 5 9 to 10 | 11.7 | 111 | 5// |) · W | | 770 | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list and cyanide. |
| 9/10/04 /556 1610 1614 C.Y | 2-31-DP-18 | | レン | | 1 | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. |
| 109 0752 9/21/09 748 6759 750 canu | 12-31-DP-19 | 0 10 10 |)) × | | Y · V | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. ON HOLD, Vefusal @ ~bfl at |
| 7/21/09 0708 0+1/(-4) 0709 0725 | 2-31-DP-20 | * 0 to 1 4 to 5 9 to 10 | 70 | | " | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. |

10 pea gravel Cancelled

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| · | | | | Cons | stituent Grou COCs | | 1 Area | | Other | | | | |
|--|-----------------------|--------------------------------|------------|------------------|---|----------|---------------------------------------|----------|------------|---|--|--|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total Metals | Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | тос | Rationale for Selection of Laboratory Analyses | | | |
| | | | | | | | | L SAMPLI | NG SUMMARY | Transmit for deliberion of Eusperatory Fundayous | | | |
| 91,-100,1100 | Direct Push Locations | | | | | | | | | | | | |
| 9/15/09 1/00 1/04 1/10 1/10/09 1232 | 2-31-DP-21 | 0 to 1 4 to 5 9 to 10 | ١١١ | | 1. | | ; | - | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. | | | |
| 1234 | 2-31-DP-22 | 4 to 5 | 111 | | V | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. | | | |
| 1115709 1133 | 2-31-DP-23 | 4 to 5 | 111 | | 77. | | | | · : | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. | | | |
| 1/3/09 2030 | 2-31-DP-24 | 0 to 1 4 to 5 9 to 10 | <u>/</u> • | | <u></u> | ! | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. Verify cyanide non-detect associate with elevated RLs. | | | |
| 19109 1720 1728 1742 | 2-31-DP-25 | 0 to 1 4 to 5 9 to 10 | ゾ. ン | | | y• | | | | Constituent list to match groundwater list at this location. Verify cyanide non-detect associated with elevated RLs. | | | |
| 919109 1552 | 2-31-DP-26 | ★0 to 1 4 to 5 9 to 10 | 1.0 | | - | | | | | Evaluate extent of selected soil COCs from the VOC analyte list. Placement of location is respective of building limitations and proximity of functioning professional office space. | | | |
| 9/15709 16/5 0922 0937 | 2-31-DP-27 | 0 to 1 4 to 5 9 to 10 | レ・ | | 1. | ✓· | | : | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. Verify cyanide non-detect associated with elevated RLs. | | | |
| 3/31/0 9 1547 9/1/09 1551 1555 | 2-31-DP-28 | 0 to 1 4 to 5 9 to 10 | ソシン | | ン・ロン | V. | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. Verify cyanide and PCB non-detect associated with elevated RLs. | | | |
| 9/8/09 1623 | 2-31-DP-29 | 0 to 1 4 to 5 9 to 10 | | | • | ンソン・ | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ | , | | Constituent list to match groundwater list at this location. Verify cyanide non-detect associated with elevated RLs. Evaluate extent of TPH in soil. | | | |
| J 9115109 6638 | 2-31-DP-30 | 9 to10 In Tunnel K | å | | /• | | | ! | | Verify PCB non-detect associated with elevated RLs. Placement of location is respective of building limitations and proximity of functioning professional office space. Groundwater will be sampled to support the pathway evaluation for silver. | | | |
| \$\langle 8\langle 3\langle 09\langle 1858 \\ \frac{1905}{1905} \\ \frac{1905}{1906} | 2-31-DP-31 | →0 to 1 4 to 5 9 to 10 | | | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | 7 | | Verify PCB non-detect associated with elevated RLs. | | | |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling Boeing Plant 2

| | | | | Cons | stituent Grou COCs | | 1 Area | | Other | |
|--|---------------|--------------------------------|-------------|------------------|-----------------------|---------|----------------------------|----------|-----------|--|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total Metals | Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | тос | Rationale for Selection of Laboratory Analyses |
| | <u> </u> | | | | | | SOI | L SAMPLI | NG SUMMAR | Y |
| .8131/09 1743 | Direct Push L | | 1 | | T , | | , | 1 | | |
| V L 1745 | 2-31-DP-32 | 0 to 1 4 to 5 9 to 10 | 1. | | 4. | | | | | Evaluate extent of selected soil COCs from the VOC analyte list. |
| 8/31/09 1526 1530 1535 | 2-31-DP-33 | 0 to 1 4 to 5 9 to 10 | \ \ \ | | >> \ | | | | | Evaluate extent of selected soil COCs from the VOC analyte list. |
| 9/2/09 1528 1530,1532 1535 | 2-31-DP-34 | 0 to 1 7 4 to 5 9 to 10 | V. V | <i>'</i> | 11) | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. |
| 9/8/29 1824 1829 | 2-31-DP-35 | 0 to 1 4 to 5 9 to 10 | 1 | | 1 | | - | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. |
| 9/1/09 2032 | 2-31-DP-36 | 0 to 1 4 to 5 9 to 10 | 1. | | 1. | | | The way | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list and PCBs. |
| 918109 1748 | 2-31-DP-37 | 0 to 1 4 to 5 9 to 10 | 7:4 | | 550 | | | <u></u> | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list and PCBs. |
| 9/3/09 1539 | 2-31-DP-38 | 0 to 1 4 to 5 9 to 10 | | | 7 | | | 6 | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list and PCBs. |
| 9/16/09 912 937 937 939 14 | 2-31-DP-39 | 0 to 1 4 to 5 ★9 to 10 | V . V | V V V | 77 • | 111 | 707 | 5. | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list and PCBs. |
| 9/2/09 1915 | 2-31-DP-40 | 0 to 1 4 to 5 9 to 10 | W O | V . | | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals and SVOC analyte lists. |
| 918109 1949 | 2-31-DP-41 | 0 to 1 4 to 5 9 to 10 | 11) |))) | الا | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals and SVOC analyte lists. |
| 1955 19/4/09 69 ₀₁ 0903 | 2-31-DP-42 | 0 to 1 4 to 5 9 to 10 | 1. | W | V V V | | | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. |
| 9706 | | | | | | | | | | · |

Table 2-2 2-31 Area Proposed CMS Data Gaps Sampling **Boeing Plant 2**

| | | | | Cons | stituent Grou COCs | ips with 2-3 in Soil | 1 Area | | Other | |
|---|-------------------------|--------------------------------|---------|------------------|-----------------------|-------------------------|----------------------------|---------|------------|---|
| | Location | Sample Interval (ft bgs) | VOCs | SVOCs (cPAHs) | Total Metals | Cyanide | TPH-G, TPH-Dx, TPH-O | PCBs | тос | Rationale for Selection of Laboratory Analyses |
| | | | | | | | SOI | L SAMPL | NG SUMMARY | |
| | Direct Push I | | | | | | | | | |
| 7/18/09 2035 2037 2048 | 2-31-DP-43 | 0 to 1 4 to 5 9 to 10 | - | | - | | | | | Evaluate extent of selected soil COCs from the VOC analyte list. |
| 12110 9 0533 9/15/09 522 V 0535 carrel 522 refusal 05 | 2-31-DP-44 | 0 to 1 4 to 5 9 to 10 | ** | | X | | | X | / | Evaluate extent of PCBs in soil. Samples on hold. Retry for 3 of time. cancelled |
| 9/9/09 1908 | 2-31-DP ₋ 45 | 0 to 1 4 to 5 9 to 10 | 5 | | 7 | | · | 200 | | Evaluate extent of PCBs in soil. |
| 919109 1953 | 2-31-DP-46 | 0 to 1 4 to 5 9 to 10 | | | J. A. | | | 7. | | Evaluate extent of PCBs in soil. |
| 9/809 1442(-) | 2-31-DP-47 | ★9 to 1 4 to 5 9 to 10 | 1. | | V. | | | 000 | | Verify PCB non-detect associated with elevated RLs. Placement of location is respective of building limitations and proximity of functioning professional office space. Groundwater will be sampled to support the pathway evaluation for silver. |
| 9/3/09/9/32 | 2-31-DP-48 | 0 to 1 4 to 5 9 to 10 | V. | | · · · | · · · | - | | | Constituent list to match groundwater list at this location. Evaluate extent of selected soil COCs from the metals analyte list. Verify cyanide non-detect associated with elevated RLs. |
| 918107 1518 | 2-31-DP-49 | 0 to 1 4 to 5 9 to 10 | | | ンノ・ ノ | レンタ | 7-17 | | | Constituent list to match groundwater list at this location. Verify cyanide non- detect associated with elevated RLs. Evaluate extent of TPH in soil. |
| 919109 1355 | 2-31-DP-50 | 0 to 1 4 to 5 9 to 10 | ひょ. | | 7. | | | 5 | | Verify PCB non-detect associated with elevated RLs. |
| lyac | Notes: | | Not one | liaabla | | | | | | |

Not applicable PCBs

Polychlorinated biphenyls

SVOCs TPH

Semivolatile organic compounds Total petroleum hydrocarbon

VOCs

Volatile organic compounds

Note on sample intervals

For existing wells, sample interval is the installed screen interval. For new wells, sample interval is the planned approximate screened interval. For soil samples, sample interval is the planned sampling depth.

1 Wed 15,30,26,25 10th 20,18,119,16,17,22 7 F 42,10,(12)50.